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H. Cumming, F.L.S.

1840.

CONCHOLOGIA ICONICA:

OR,

ILLUSTRATIONS

OF THE

SHELLS OF MOLLUSCOUS ANIMALS.

VOL. I.

CONTAINING MONOGRAPHS OF THE GENERA

CONUS	PHORUS	DELPHINULA
PLEUROTOMA	PECTUNCULUS	CYPRICARDIA
CRASSATELLA	CARDITA	HARPA

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BY

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AUTHOR OF 'CONCHOLOGIA SYSTEMATICA', 'ELEMENTS OF CONCHOLOGY', &c.

"The Almighty Maker has throughout
Discriminated each from each, by strokes
And touches of his hand with so much art
Diversified, that two were never found
Twins at all points."—*Cowper.*

00087960

LONDON:
REEVE, BROTHERS, KING WILLIAM STREET, STRAND.
1843

1a

2a

1b

3

2b

2c

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Sowerby del. et lith.

prel. lith. Linn. imp.

CONUS.

PLATE I.

Genus CONUS, Linnæus.

Testa conica, ad basin leviter emarginata, anfractibus confertim volutis, non descendentibus; spirâ variâ, apice obtuso, nonnunquam subacuto; aperturâ longitudinali, plerumque angustâ; columellâ rectâ; labro simplici, tenui, acuto, supernè emarginato. Operculum corneum, plerumque minutum.

Shell conical, slightly emarginated at the base; whorls closely rolled upon their axis, not descending; spire variable, sometimes acuminated, sometimes flat; apex obtuse, occasionally rather sharp; aperture longitudinal, generally narrow; columella straight; lip simple, thin and acute, emarginated at the upper part. Operculum horny and generally very small.

The word Conus, or one of somewhat analogous interpretation, has been attached in all ages to this highly esteemed genus. The shells which are referred to it exhibit an extraordinary variation of painting, and they present so great a uniformity of structure, that the determination of species is in some instances rather a matter of fancy or speculation. The only elaborate memoir of this group prior to Lamarck is that published by Bruguière in the 'Encyclopédie Méthodique,' from the writings of M. Hwass, a distinguished collector of Copenhagen, and little has been added by subsequent writers. Sowerby has contributed figures of several new species in his 'Conchological Illustrations,' but they are not accompanied with descriptions; these, therefore, together with many of still more recent discovery, render the genus one of considerable interest.

Species 1, *a* and *b*. (Mus. Stainforth.)

CONUS STAINFORTHII. *Con. testâ conico-turbinatâ, leviter flexuosâ, albidâ, rubro purpureoque tinctâ, ad basin rosaceâ; granosâ, granis minutis, rubido-carneove-albis, in seriebus equidistantibus parallelis transversaliter dispositis; spirâ mediocriter convexâ, tuberculis asperis regulariter coronatâ; apice mucronato, symmetricè acuto; aperturâ subinflatâ, labro solidiusculo, intus extusque albo.*

STAINFORTH'S CONE. Shell conically turbinated and slightly flexuous, whitish, irregularly stained with a warm reddish tint and dark purple; granular, grains minute, of a reddish or fleshy-white colour, transversely arranged in equidistant parallel rows; spire moderately convex, very regularly coronated with a row of sharp tubercles; apex very sharply pointed; aperture somewhat inflated; rather solid, white both internally and externally.

Hab. —— ?

The richly variegated purple painting of this new and very beautiful shell (which I respectfully dedicate to its possessor), with the rows of light small granular pimples standing out in relief, renders it eminently characteristic.

There is another specimen in Mr. Cuming's collection.

Species 2.

CONUS NOBILIS. *Con. testâ subcylindraceâ, plus minusve luteolâ, maculis sparsis albis trigono-rotundatis profusè pictâ, et lineis transversis, fulvo alboque articulatis, plerumque ornatâ; spirâ plano-concavâ, apice mucronato.*

THE NOBLE CONE. Shell rather cylindrical, more or less inclining to yellow, profusely painted with white, triangularly-rounded, scattered spots, and generally ornamented with transverse lines, articulated with white and yellow; spire flatly concave, pointed at the apex.

Variety α. (Fig. 2 *c*, Mus. Stainforth.)

Testâ pallidè luteo-citrinâ; maculis cordiformibus grandis; lineis transversis ferè obsoletis.

Shell pale lemon-colour; spots large, and heart-shaped; transverse lines almost obsolete.

LINNÆUS, Syst. Nat., p. 1168.

MARTINI, Conch., vol. ii. pl. 62. f. 689.

Hab. Philippine Islands, Moluccas, &c.

This shell, the well-known typical variety described by Linnæus, is widely distributed throughout the tropical regions.

Variety β. (Fig. 2 *a*, Mus. Stainforth.)

Testâ luteo-castaneâ, maculis trigonis parvis saturatâ; dupliciter zonatâ, zonis lineis transversis vividè fusco-punctatis; apice roseo-tincto.

Shell chestnut-yellow colour, profusely covered with small triangular spots; doubly banded; bands with the transverse lines vividly spotted; apex stained with rose-colour.

CHEMNITZ, Conch., vol. x. pl. 141. f. 1313 and 1314.
Encyclopédie Méthodique, pl. 339. f. 7.
Hab. Philippine Islands, Moluccas, &c.

Chemnitz seems to have been the first to notice this variety under the facetious title of *Maritus formosus*.

Variety γ. (Fig. 2 *b*, Mus. Cuming.)

Testâ magis cylindraceâ, versus spiram attenuatâ, luteo-castaneâ, maculis trigonis, paucioribus; indistinctè zonatâ, lineis transversis nullis aut obsoletis.

Shell more cylindrical, attenuated towards the spire, yellowish chestnut-colour, with the spots triangular and fewer in number; indistinctly zoned; transverse lines wanting or obsolete.

Hab. Island of Cuyo, Philippines.

A new and very distinct variety collected by Mr. Cuming at the above-mentioned island.

Species 3. (Mus. Cuming.)

CONUS VEXILLUM. *Con. testâ subobeso-conicâ in medio albo-fasciatâ, fasciâ fusco-maculatâ, lineis luteolis flexuosis longitudinaliter venulatâ; spirâ fusco-maculatâ, lævissimâ, obtusâ, apice luteo; basi nigricante.*

THE FLAG CONE. Shell rather stoutly conical, white-banded in the middle; band interrupted with dark blotches, and veined longitudinally with undulated yellowish lines; spire brown-spotted, smooth and obtuse, apex yellow; base of the shell blackish.

MARTINI, Conch., vol. ii. pl. 57. f. 629.

Hab. Philippine and Society Islands, Moluccas, &c.

The magnificent shell here figured was collected by Mr. Cuming at the Island of Capul, one of the Philippines. The central band is extremely variable in this species; it disappears, indeed, in the shell before me on the obverse side to that exhibited in the plate. Lamarck quotes as a variety of the above a shell figured by Chemnitz under the name of *Conus mutabilis*; it is however exceedingly difficult to say what species that figure is intended to represent.

Species 4. (Mus. Stainforth.)

CONUS ZONATUS. *Con. testâ solidâ, violaceo-cæsiâ, tessellis albis alternatis zonatâ, filis croceis transversis equidistantibus, parallelis, vividè pictâ; spirâ obtusè convexâ, fortissimè coronatâ; apice truncato.*

THE ZONED CONE. Shell solid, violaceous sky-colour approaching to dull green, zoned with alternate white square spots; zones vividly marked out with transverse yellowish lines, equidistant, and parallel to each other; spire obtusely convex, and very strongly coronated; apex truncated.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 613.
CHEMNITZ, Conch., vol. x. pl. 139. f. 1286 to 1288.
Hab. Asiatic Ocean; Hwass.

Chemnitz, who appears to have been the first to figure and describe this shell, called it *Murus lapidius*, from the imagined resemblance of its marking to the tracings of a stone wall. The specimen here represented was received in a collection of shells from Calcutta, without mention of its locality.

Species 5. (Mus. Cuming.)

CONUS VICTOR. *Con. testâ subcylindraceo-conicâ, albâ maculis albis inspersâ, fasciis duabus moniliformibus brunneo-castaneis, latis, concinniter ornatâ; spirâ convexâ, circulatim excavatâ, apice subacuto.*

THE CONQUEROR CONE. Shell rather cylindrically conical, yellow, sprinkled with white spots and [illegible] ornamented with two broad, dark chestnut-colored necklace bands; spire convex, excavated round the tops of the whorls; apex rather pointed.

BRODERIP, Proc. Zool. Soc., 1842, p. 54.
Hab. ——?

There is another similar specimen of this new and striking shell in the collection of the Rev. A. Harford.

Species 6. (Mus. Cuming.)

CONUS CROCATUS. *Con. testâ oblongo-conicâ, crocatâ; maculis albis, subtrigonis, paucis, irregulariter inspersâ; transversim et longitudinaliter striatâ, striis ferè obsoletis; spirâ convexo-acutâ, anfractuum margine superiori rotundatâ.*

THE SAFFRON-COLOURED CONE. Shell of an oblong-conical form, saffron-coloured, irregularly sprinkled with a few white, somewhat triangular spots; transversely and longitudinally striated, striæ nearly obsolete; spire convex and acute; upper edge of the whorls rounded.

LAMARCK, Anim. sans vert., vol. vii. p. 503.
Hab. Matnog, Island of Luzon, Philippines.

A splendid specimen of this shell, lately collected by Mr. Cuming, enables me to illustrate (I believe for the first time) a most interesting species described many years ago by Lamarck.

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8a

8b

9

8c

8d

10

CONUS.

PLATE II.

Species 7. (Mus. Stainforth.)

CONUS AUGUR. *Con. testâ pyramidato-conicâ, albido-flavescente, punctis brunneis numerosissimis seriatim inspersâ; maculis largis furvo-nigricantibus vividè bizonatâ, zonis sæpè nimiùm interruptis; spirâ obtusâ, leviter striatâ.*

THE AUGUR CONE. Shell pyramidally conical, faintly yellowish, sprinkled with a considerable number of small brown specks disposed in transverse rows; strikingly banded in two places with large dusky blackish spots or patches, bands often much interrupted; spire obtuse, lightly striated.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 685.

MARTINI, Conch., vol. ii. pl. 58. f. 641.

Hab. Ceylon, &c.

This is an excellently defined species; I am not aware of any other that could be at all confounded with it. The shell here represented is a very characteristic example, the bands being more clearly defined than in the generality of specimens.

Species 8.

CONUS THALASSIARCHUS. *Con. testâ cylindraceo-conicâ in medio plerumque leviter attenuatâ, lineis variè pictâ, spirâ plus minusve depressâ.*

THE NEW ADMIRAL CONE. Shell cylindrically conical, generally a little attenuated in the middle, variously painted with lines, spire more or less depressed.

GRAY, MSS. British Museum.

Variety *α*. (Fig. 8 *d*, Mus. Cuming.)

Testâ albidâ, lineis furvo-nigricantibus, acutissimè et triangulariter undulatis, profusè pictâ; lineis sæpè in medio quasi fasciâ interruptis.

Shell whitish, profusely painted with dusky blackish lines, very sharply triangularly undulated, and mostly interrupted in the middle so as to leave a transverse band.

Hab. Puteao, Island of Luzon, Philippines.

The specimen here figured is the largest of a number collected by Mr. Cuming at the island of Luzon, and far exceeds the average size of them. On the obverse side to that which I have represented the lines become interrupted in the middle of the shell, so as to leave an open space like a band, a character much more clearly developed in the smaller specimens; the lines too vary in those in assuming a more triangular style of pattern, and in being fewer and more scattered.

Variety *β*. (Fig. 8 *b*, Mus. Cuming.)

Testâ lineis, paululum undulatis, longitudinaliter porrectis; aut fasciâ aut nullâ.

Shell with the lines finely waved in a longitudinal direction, sometimes leaving a white band, sometimes not, as in variety *α*.

Hab. Puteao, Island of Luzon, Philippines.

This very pretty variety, in which the lines do not assume the triangular pattern characteristic of variety *α*, was collected by Mr. Cuming with the former; very few specimens were found, however, at all approaching in size and extreme regularity of pattern to the one figured.

Variety *γ*. (Fig. 8 *a*, Mus. Cuming.)

Testâ in medio vividè fasciatâ, fasciâ irregulariter punctatâ, lineis paucioribus, subsparsis, suprà triangulariter infrà porrectè depictis, interstitiis croceo-tinctis.

Shell strongly banded in the middle, band irregularly dotted; lines fewer in number and somewhat scattered, disposed to assume the triangular form above the band, the straightly waved form below it; and the interstices, more particularly near the band, are stained with saffron-yellow.

Hab. Island of Ticao, Philippines.

This variety exhibits a pleasing yellow tint, of which there is no indication in the two previous ones; in pattern it partakes of the character of both.

Variety *δ*. (Fig. 8 *c*, Mus. Cuming.)

Testâ majore, bizonatâ, zonis latis, croceis, transversim regulariùs punctatis; lineis suprà et infrà perpaucis, undulatis, obliquè depictis.

Shell larger, doubly zoned; zones broad, saffron-coloured, spotted across with more regularity, lines running down the spaces above and below the zones obliquely waved and comparatively few.

Hab. Island of Ticao, Philippines.

This variety, of which Mr. Cuming only collected one or two specimens, presents so striking a contrast with

the rest that it almost requires the representation of a dozen intermediate varieties to show the connection. The abundant means of comparison which a tolerable number of these shells, collected together in the same group of islands, the Philippines, have afforded, leave no doubt of their complete specific relation. They were found by Mr. Cuming upon mud-banks at low water, and, there is every reason to suppose, are confined to that locality.

This beautiful series of the *Conus thalassiarchus* forms a most interesting addition to the genus, the species having been only known hitherto by a few miserable specimens, such as were figured by Sowerby, for want of better, in his 'Conchological Illustrations,' fig. 80 and 85.

Species 9. (Mus. Stainforth.)

Conus miles. *Con. testâ solidâ, pallidè flavescente, fasciâ fusco-ferrugineâ transversim, filisque flexuosis pallidioribus longitudinaliter pictâ; fasciâ interdum at rarò obsoletâ; spirâ plano-obtusâ, flavidâ; basi nigerrimo-fuscâ.*

The soldier Cone. Shell solid, pale yellowish colour, painted transversely with a single dark ferruginous band, longitudinally with undulated thread-like lines of a paler colour; band sometimes but rarely obsolete; spire flatly obtuse, yellowish; base blackish brown.

Linnæus, Syst. Nat., p. 1167.
Martini, Conch., vol. ii. pl. 59. f. 663 and 664.
Hab. Ceylon, Mauritius, Moluccas, &c.

No one can fail to distinguish this species, which, being widely distributed over the globe, is brought in great abundance. The shell here represented is of large dimensions, and the markings are unusually clear and well-defined.

Species 10. (Mus. Stainforth.)

Conus glaucus. *Testâ obeso-conicâ, quasi turgidâ, glauco-cærulescente, lineis fuscis numerosis, interruptis, confertis, cinctâ; spirâ obtuso-convexâ, mucronatâ, nigerrimo-fusco maculatâ; basi striatâ.*

The grey Cone. Shell stoutly conical, as though swollen, greyish blue, surrounded with numerous, close-set, interrupted lines; spire obtusely convex, pointed, spotted with dark black-brown triangular patches; base striated.

Linnæus, Syst. Nat. (Gmelin edit.), p. 3382.
Chemnitz, vol. x. pl. 138. f. 1277 and 1278.
Hab. Moluccas, Philippines, &c.

The grey colour of this shell is perhaps its most striking characteristic, for there are many dwarf varieties of the *Coni betulinus* and *Suratensis* which approach very near to it in other respects.

11b

11a

11c

11d

12

11e

13a

14

13b

CONUS.

PLATE III.

Species 11.

CONUS AMMIRALIS. *Con. testâ turbinatâ, aut lævi, aut granulatâ, albidâ, flavo subtilissimè reticulatâ, brunneo transversim fasciatâ; fasciis plus minusve latis et numerosis, maculis albis trigonis vividè inspersis; spirâ concavo-acutâ, aut lævi, aut coronatâ.*

THE ADMIRAL CONE. Shell turbinated, whitish, very finely reticulated with yellow, painted transversely with broad brown bands crossed and recrossed with darker lines of the same colour, and vividly sprinkled with triangular white spots; spire concave and acute, the tops of the whorls being either smooth or coronated.

LINNÆUS, Syst. Nat. (Gmelin edit.), p. 3378.

Hab. Society Islands, Philippines, Moluccas, &c.

Before describing the varieties of this highly-valued species, esteemed in all ages for its rarity and beauty, it is important to explain that I differ entirely from my predecessors, in taking the dark brown painting to be the ground character of the shell. Instead therefore of describing the shell, like Bruguière and Lamarck, to be brown, with yellow net-work bands, I describe it as yellow, with brown bands. An examination of the Coronated Admiral, Fig. 11 *e*, a variety apparently unknown to those conchologists, will testify the correctness of this view. The bands in this species are so exceedingly variable in their distribution (still within a very limited degree) that I propose to include the nine varieties noted by Lamarck under notice of four, the coronated variety making five. Attaching so much importance to slight variations tends rather to confuse than to simplify. After carefully examining a long series of these Cones, I have come to the conclusion that they may be more conveniently classed under the following five heads:— 1. α, one or two uninterrupted broad bands; 2. β, several bands, or two broad bands with one or more narrow bands running between them; 3. γ, two or more bands of paler colour with spots very large; 4. δ, shell small, granulated, sometimes slightly coronated, and variously banded; 5. ϵ, shell strongly coronated, bands variable, but generally narrower and more distant.

Variety α. (Fig. 11 *b*, Mus. Cuming.)

Testâ bifasciatâ, interdum at rarò unifasciatâ, fasciis latis, maculis profusè inspersis.

Shell two-banded, sometimes but rarely singly banded; bands broad, and profusely sprinkled with spots.

Conus ammiralis, var. *b*? and *g*, Lamarck.

The two-banded shell may be regarded as the common typical variety of the species. That which I have selected for illustration was found by Mr. Cuming at the island of Ticao; it is however very generally distributed amongst the Philippine, Society and other islands in the tropical regions.

Variety β. (Fig. 11 *c*, Mus. Stainforth.)

Testâ fasciis tribus aut pluribus; plerumque duabus, latis, unâ perangustâ interveniente.

Shell with three or more bands; generally two broad bands with a very narrow one intervening.

Conus ammiralis, var. *a*, *h* and *i*, Lamarck.

Under this head I include all those in which the two broad bands of the first variety are divided into three or more.

Variety γ. (Fig. 11 *d*, Mus. Stainforth.)

Testâ plerumque majore; fasciis duabus aut pluribus, pallidè castaneis, maculis maximis.

Shell generally larger; bands two or more, pale chestnut colour; spots very large.

Conus ammiralis, var. *e* and *f*, Lamarck.

This is a very characteristic variety.

Variety δ. (Fig. 11 *a*, Mus. Stainforth.)

Testâ minore, superficie granulatâ, diversè fasciatâ.

Shell smaller, surface granulated, variously banded.

Conus ammiralis, var. *c* and *d*, Lamarck.

The granulated variety appears to be always of smaller size.

Variety ϵ. (Fig. 11 *e*, Mus. Stainforth.)

Testâ plerumque majore, albidâ; fasciis tribus aut pluribus, angustioribus, interruptis, interstitiis irregulariter reticulato-pictis.

Shell generally larger, whitish, with three or more narrower interrupted bands; spaces between them filled with very irregular net-work.

This beautiful shell exhibits a great peculiarity of marking, besides that of being coronated. The bands

are very much broken up by the confusion of white spots, and the net-work which covers the rest of the surface differs essentially from that in any other. It is exceedingly irregular, forming triangular spots of all dimensions, miscellaneously intermingled.

Species 12. (Mus. Stainforth.)

Conus Sumatrensis. *Con. testâ subobeso-conicâ albido-lutescente, lineis latis, fuscis, longitudinaliter confluentibus, vividè pictâ, quibusdam in medio interruptis; spirâ obtusâ, variegatâ.*

The Cone of Sumatra. Shell rather stoutly conical, pale yellow, vividly painted with broad brown lines, running together in a longitudinal direction, some of them being interrupted in the middle, spire obtuse and variegated.

Lamarck, Anim. sans vert., vol. vii. p. 472.

Princeps Sumatræ, Chemnitz, vol. x. pl. 144 A. f. *a. b.*

Hab. Red Sea. Rüppell.

The longitudinal markings of this shell are very characteristic.

Species 13. (*a* and *b*, Mus. Stainforth.)

Conus dux. *Con. testâ cylindraceo-conicâ, rubido-fusco nebulosâ, transversim tæniolatâ et striatâ, tæniolis fusco alboque articulatis; spirâ convexo-exsertâ, apice obtuso.*

The leader Cone. Shell cylindrically conical, clouded with reddish brown, transversely striated, and crossed with small riband-like bands, articulated with brown and white; spire convex and rather prominent, apex obtuse.

Hwass, Enc. Méth. vers, vol. i. part 2. p. 732.

Martini, Conch., vol. ii. pl. 52. f. 571.

Hab. Matnog, Island of Luzon, Philippines, &c.

I am unacquainted with the yellow variety from the collection of M. Hwass, described and figured in the 'Encyclopédie Méthodique,' and copied by Lamarck, and Schubert and Wagner; it might probably have been a worn specimen.

Species 14. (Mus. Cuming.)

Conus floccatus. *Con. testâ ovato-conicâ, lacco-rubido nebulosâ et leviter undulatâ, lineis brevibus longitudinalibus transversim tæniolatâ, maculis albis irregularibus quasi floccis plus minusve inspersâ.*

The snow-flaked Cone. Shell ovately conical, clouded and lightly waved with a ruddy lake-colour; transversely filleted with short longitudinal lines, and more or less sprinkled with irregular white spots like flakes of snow.

Sowerby, Conch. Illus., f. 112.

Hab. Matnog, Island of Luzon, Philippines.

This beautiful shell has been confounded by some authors with the *Conus dux*.

16 a

15

16 b

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CONUS.

PLATE IV.

Species 15. (Mus. Stainforth.)

CONUS PONTIFICALIS. *Con. testâ ovato-turbinatâ, coronatâ, albâ, epidermide olivaceo-luteâ in medio tantum latissimè fasciatâ; spirâ maximâ, obesâ, elevatâ, apice subobtuso.*

THE PONTIFICAL CONE. Shell ovately turbinated, coronated, white, very broadly banded, in the middle only, with bright olive-yellow epidermis; spire very large, stout, and elevated, apex rather obtuse.

LAMARCK, Anim. sans vert., vol. vii. p. 459.

DELESSERT, Recueil de Coquilles, pl. 40. f. 15, *a*, *b*.

Hab. Tasmania, Lamarck.

The broad transverse band of yellow epidermis is a very striking character in this shell, and the coronated row of white tubercles standing out in clear relief above presents a neat and most delicate contrast.

Species 16. (Fig. *a* and *b*, Mus. Cuming.)

CONUS SOLANDRI. *Con. testâ cylindraceo-turbinatâ, subcoronatâ, transversè striatâ; striis frequentibus, aut infernè, aut ubique granulosis; pallidè aurantiâ, interdum aurantio-coccineâ, interdum spadiceo-laccâ, fasciâ albâ in medio, castaneo maculatâ et punctatâ; spirâ mediocri, rudi, leviter striatâ.*

SOLANDER'S CONE. Shell cylindrically turbinated, more or less inclined to be coronated, transversely striated; striæ frequent, granulated over either the lower or entire portion of the shell; colour of the shell yellow, yellowish scarlet or rich brown lake, banded round the middle with white, spotted with patches and dots of chestnut; spire of ordinary dimensions, rude, slightly striated.

BRODERIP and SOWERBY, Zool. Journ., vol. v. p. 50.

GRAY, Zoology of Beechey's Voyage, pl. 33. f. 3.

DELESSERT, Recueil de Coquilles, pl. 40. f. 11, *a* and *b*.

Hab. Island of Luzon, Philippines.

Several varieties of this pretty shell, which was known to the learned doctor after whom it is named, were collected by Mr. Cuming at the south end of the above island in the Straits of Bernardino; they vary from pale orange to deep rich crimson lake colour.

Species 17. (Mus. Stainforth.)

CONUS ORBIGNYI. *Con. testâ tenui, subfusiformi, gracillimè turbinatâ, versus basin valdè attenuatâ, transversim costatâ, costis lævibus, planissimis; albâ, maculis spadiceis sparsis plus minusve irregulariter pictâ; spirâ elevato-acutâ, minutissimè moniliferim coronatâ.*

D'ORBIGNY'S CONE. Shell thin, somewhat fusiform, slenderly turbinated, very much attenuated towards the base; transversely ribbed, ribs smooth and peculiarly flat; white, more or less irregularly painted with scattered reddish brown spots; spire elevated, acute, and finely coronated, in a beaded manner.

ARDOUIN, Mag. de Zool. Moll., 1838, pl. 20.

Conus planicostatus, Sowerby, Conch. Illus., 1840.

Hab. China? Dussumier.

The peculiar contour of this shell is as characteristic a feature as the flatness of the ribs by which it is encircled. I only know of few specimens.

Species 18. (Mus. Cuming.)

CONUS SURATENSIS. *Con. testâ subobeso-conicâ, prope basin attenuatâ, quasi folliformi; albidâ, maculis nigricantibus, subquadratis, linearibus, cæruleo-nebulosis, seriatim cinctâ, aliis infra alios descendentibus; basi flavidâ, interdum immaculatâ; spirâ convexiusculâ, solidâ, fusco undatim maculatâ.*

THE SURAT CONE. Shell rather stoutly conical, attenuated near the base, balloon-shaped as it were; whitish, surrounded with rows of square linear blackish spots, clouded in places with blue; spots mostly descending in regular order one under the other; base yellow, sometimes clear and unspotted; spire rather convex, solid and spotted with waved outspreading spots.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 669.

Conus betulinus lineatus, Chemnitz, Conch., vol. xi. pl. 181. f. 1752 and 1753.

Hab. Province of Misamis, Island of Mindanao, Philippines. (Found in mud in the clefts of rocks at low water.)

We are here indebted to Mr. Cuming for having collected very remarkable specimens of a species which we might have otherwise accounted to be but a casual variety of the *Conus betulinus*.

Species 19. (Mus. Stainforth.)

CONUS AUSTRALIS. *Con. testâ elongatâ, cylindraceo-turbinatâ, transversim liratâ, liris nunc lævibus, nunc granosis; albidâ, maculis grandibus sæpissimè bizonatâ, minoribus linearibus ubique venosâ; spirâ elevatâ, acutâ.*

THE SOUTHERN CONE. Shell rather long, cylindrically turbinated, transversely ridged, ridges sometimes smooth, sometimes granular, generally doubly banded with large chestnut spots and veined over the entire surface with smaller linear ones; spire elevated and acute.

CHEMNITZ, Conch., vol. xi. pl. 183. f. 1774 and 1775.

Hab. Swan River.

The specimen selected for illustration is small and perfectly smooth; the granular variety is scarcely of sufficient importance to require especial notice.

Species 20. (Mus. Stainforth.)

CONUS LITHOGLYPHUS. *Con. testâ turbinatâ, versus basin granulatâ, rubro-fuscâ, infernè nigricante, maculis conspicuis niveis supernè et medianè fasciatâ; spirâ mediocri, subobtusâ.*

THE PEBBLE-CARVED CONE. Shell turbinated, granulated towards the base, reddish brown, blackish at the basal extremity, banded round the middle and upper parts with clear snowy white spots; spire ordinary, rather obtuse.

MEUSCHEN, Enc. Méth. vers, vol. i. part 2. p. 692.

Ammiralis Petræus, Chemnitz, Conch., vol. x. pl. 140. fig. 1298.

Hab. Island of Ticao, Philippines, &c.

The two bands of snowy white spots which encircle the middle and upper portion of this shell make it especially easy to distinguish.

Species 21. (Mus. Stainforth.)

CONUS CENTURIO. *Con. testâ dilatato-turbinatâ, versus basin sulcatâ; albâ, fasciis tribus aurantiis cingulatâ, interstitiis lineis, obliquè et vividè undatis, venustissimè pictis; spirâ concavo-convexâ, anfractuum angulis supernis fusco-maculatis; apice obtuso.*

THE CENTURION CONE. Shell dilately turbinated, sulcated towards the base; white, encircled with three orange bands having the interstices elegantly painted with strong oblique zigzag lines; spire concavely convex, brown-spotted round the upper angle of the whorls; apex obtuse.

BORN, Mus., pl. 7. f. 10.

Vigiliarum præfectus, Martini, Conch., vol. ii. pl. 59. f. 655.

Hab. —— ?

This shell is not unlike some varieties of the *Conus Malaccanus*; they are, however, well distinguished from each other, the former being the more dilated, and well characterized by the zigzag lines.

Species 22. (Mus. Stainforth.)

CONUS ADAMSONI. *Con. testâ cylindraceo-conicâ, ventricosiusculâ, supernè attenuatâ, nitente quasi porcellanea, albâ, zonis tribus roseo-nebulosis cingulatâ, interstitiis punctiunculis triquetris, diagonaliter dispositis, elegantius ornatâ; anfractibus supra infraque sulcatis; spirâ depresso-planâ, sulcatâ et striatâ.*

ADAMSON'S CONE. Shell cylindrically conical, rather ventricose, attenuated at the upper part, shining as if it were porcelain; white, encircled with three clouded rose-tinted zones, the spaces between them being elegantly filled up with small three-cornered dots ranged in diagonal order; upper and lower parts of the whorls sulcated; spire flatly depressed, grooved and striated.

GRAY, MSS. British Museum.

Conus cingulatus, Sowerby, Tankerville Catalogue, Appendix, p. xxxiv. and Conch. Illus., f. 108.

Hab. Australia.

This beautiful rose-tinted porcelain shell appears to have been first introduced by Sowerby; I am forced, however, to adopt the manuscript title subsequently attached to it by Gray, because the name first proposed had been already used by Lamarck in reference to another species. Care must however be taken not to confound Gray's *Conus Adamsoni*, named after a distinguished amateur conchologist of Newcastle, with Lamarck's *Conus Adansoni*, dedicated to the memory of the celebrated malacologist of Senegal.

23a

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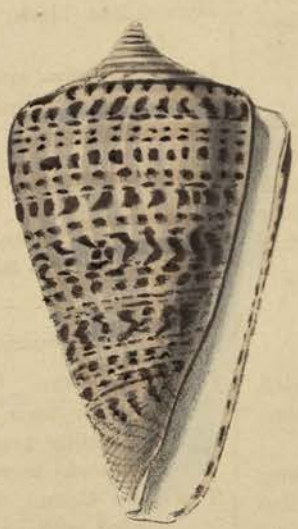
23b

25



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28a

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28b

TAYLOR — LIBRARY — ROYAL ASIATIC SOCIETY ON THE BOMBAY BRANCH OF THE

Sowerby del. et lith.

CONUS.

PLATE V.

Species 23. (Fig. *a* and *b*, Mus. Saul.)

CONUS SOLIDUS. *Con. testâ conico-cylindraceâ, transversim striatâ, maculis longitudinalibus nigricantibus et aureis reticulatim supertextâ; spirâ planiusculâ, substriatâ, acuminatâ.*

THE SOLID CONE. Shell conically cylindrical, transversely striated, reticulately covered over with black and orange longitudinal blotches and net-work; spire rather smooth, a little striated, and acuminated.

SOWERBY (not of Chemnitz), Conch. Illus., f. 76.

Textile striatum? Chemnitz, Conch., vol. x. pl. 141. f. 1311.

Hab. Society and Philippine Islands; Cuming.

No one can fail to detect the very marked specific peculiarities of this shell, the dark blotching in some specimens of which occupies more than half the entire surface of the shell. The *Conus solidus* of Chemnitz (vol. x. pl. 141. f. 1310.) appears to be the dark variety of *Conus cedo-nulli*.

Species 24. (Mus. Cuming.)

CONUS INFORMIS. *Con. testâ tenuiculâ, oblongo-turbinatâ, sæpè informi; albâ, strigis irregularibus fulvo-castaneis longitudinaliter pictâ; spirâ convexo-acutâ.*

THE MIS-SHAPEN CONE. Shell somewhat thin, oblong, turbinated, often mis-shapen; white, painted longitudinally with irregular light chestnut-colour streaks.

HWASS, Enc. Méth. vers, part 2. p. 699.

LAMARCK, Anim. sans vert., vol. vii. p. 493.

Hab. American Ocean; Bruguière.

Lamarck seems to have perpetuated an error which originated with Bruguière, in referring this shell to Chemnitz's figures *e, f, g, h*, pl. 141. The *Conus informis* is a light turbinated shell, not much unlike (as Bruguière himself noticed) a young *Strombus*; whilst the figures *e* and *f*, above alluded to, are intended to represent a shell of that short, solid growth of which the preceding species (*Conus solidus*) may be quoted as an example.

Species 25. (Mus. Cuming.)

CONUS PERTUSUS. *Con. testâ oblongo-turbinatâ, roseâ, longitudinaliter incarnato-tinctâ, albifloccatâ, maculis albis subdistantibus, medianè et supernè nebulosâ; striis pertusis undique cinctâ; spirâ convexâ, apice subobtuso.*

THE PRICKED CONE. Shell oblong, turreted, rose-coloured, stained longitudinally here and there with flesh-colour, flaked with white, and clouded round the middle and upper portion of the shell with rather distant white blotches; everywhere surrounded with striæ, very faintly pricked with small holes; spire convex, apex rather obtuse.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 686. pl. 336. f. 2.

LAMARCK, Anim. sans vert., vol. vii. p. 487.

Hab. Island of Annaa, Pacific Ocean (on the reefs); Cuming.

This beautifully rose-tinted shell very much resembles the *Conus amabilis*; it may, however, be fairly distinguished by its more graceful form, and by its surface being more or less faintly flaked with white.

Species 26. (Mus. Saul.)

CONUS LEONINUS. *Con. testâ turbinatâ, albâ, maculis figurisque fuscis, numerosis, contiguis, interdum longitudinaliter confluentibus, distinctè fasciatâ; spirâ planiusculâ, mucronatâ.*

THE LION CONE. Shell turbinated, white, distinctly banded with numerous brown spots and figures, sometimes flowing together in a longitudinal direction; spire flattish, sharp-pointed.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 683. pl. 334. f. 5 and 6.

LAMARCK, Anim. sans vert., vol. vii. p. 486.

Conus proteus, var., Schubert and Wagner, Conch. Cab. Supp., p. 60.

Hab. Coasts of Mexico and the West India Islands.

In some varieties of this shell the spots are so clouded together as to assume the character of blotches; in the specimen here figured they are unusually clear and distinct.

Species 27. (Mus. Cuming.)

CONUS GRANULATUS. *Con. testâ cylindraceo-turbinatâ, transversim sulcatâ, leviter granulosâ, coccineâ,*

fasciâ albâ in medio cingulatâ; liratâ, liris purpureo-punctatis; spirâ convexo-acutâ, canaliculatâ, variegatâ.

The granulated Cone. Shell cylindrically turbinated, transversely sulcated, slightly granulated; scarlet, encircled round the middle with a white band; ridged, ridges purple-dotted; spire convexly acute, canaliculated, variegated.

Linnæus, Syst. Nat. (Gmelin's edit.), p. 3391; Enc. Méth. pl. 339. f. 9.

Hab. Island of Antigua.

This pretty scarlet Cone is rather inappropriately named, the granulations, which are often obliterated, being rarely more than feebly developed.

Species 28. (Fig. *a* and *b*, Mus. Stainforth.)

Conus Deshayesii. *Con. testâ cylindraceo-ovatâ, tenuiculâ, inflatâ, pallidè olivaceo-fulvâ, profusè rubido-puncticulatâ, maculis albis grandibus, perpaucis, sparsim et irregulariter nebulosâ; spirâ depresso-planâ, apice mucronato; aperturâ dehiscente, fauce, quasi politâ, nitente.*

Deshayes' Cone. Shell cylindrically ovate, thin, inflated, of a pale fawn-colour, profusely sprinkled with faint ruddy dots, and irregularly clouded with a few large scattered patches of white; spire flatly depressed, apex sharp-pointed; aperture rather large and open, interior highly enamelled.

Reeve, Pro. Zool. Soc., 1843.

Conus cervus, Sowerby, Conch. Illus., f. 94.

Hab. Swan River.

Only a few specimens of this very characteristic species, which may be readily recognised by its peculiar buff-tinted colour and light inflated growth, are at present known. It has been supposed hitherto to be the *Conus cervus*, but having lately examined, in the collection of M. Delessert, the identical shell described under that title by Lamarck, with the description of that illustrious author attached to it in his own handwriting, I am enabled (vide also Plate XXII.) to rectify an error which has unfortunately gained considerable circulation.

By the title now substituted for *cervus* in reference to the species under consideration, I wish to honour my kind and amiable friend M. Deshayes, now zealously occupied in completing the conchological portion of the new edition of Lamarck's 'Histoire des animaux sans vertèbres,' the publication of which has been long anxiously looked for.

Species 29. (Mus. Cuming.)

Conus aurisiacus. *Con. testâ oblongo-turbinatâ, roseo alboque zonatâ, transversim liratâ, liris granulatis, albo fuscoque tessellatis; spirâ subdepressâ, canaliculatâ, tessellatâ, apice obtuso.*

The orange Admiral Cone. Shell oblong, turbinated, zoned with white and rose-colour, transversely ridged; ridges granulated, tessellated with white, and square, crimson, blackish brown spots; spire somewhat depressed, canaliculated, tessellated, apex obtuse.

Linnæus, Syst. Nat. (Gmelin's edit.), p. 3392.

Martini, Conch., vol. ii. pl. 57. f. 636 and 637.

Hab. Moluccas; Hinds.

The alternate zones of white and rose-colour in the shell here figured are very beautifully defined, and the ridges, which seem strongly developed, are distinctly granulated.

31a

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31b

32

33

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35

Sowerby & Reeve lith.

CONUS.

PLATE VI.

Species 30. (Mus. Cuming.)

CONUS NEPTUNUS. *Con. testâ elongato-conicâ, spirâ acuminatâ, striatâ, apice acuto; pallidè carneolâ, lineis maculisque rubidis ubique nebulosâ et venosâ; versus basin leviter sulcatâ, sulcis subdistantibus; columellâ et aperturæ faucę subrosaceâ.*

THE NEPTUNE CONE. Shell elongately conical, spire acuminated, apex sharp; pale flesh-colour, everywhere veined and clouded with dull reddish spots and flexuous lines; faintly grooved towards the base, grooves rather distant; columella and within the aperture faintly tinged with rose.

REEVE, Pro. Zool. Soc., 1843.

Hab. Jacna, Island of Bohol, Philippines (found on the reefs at low water); Cuming.

This new and interesting Cone is at present unique in the collection of Mr. Cuming, being the only one of the kind found by that gentleman during his long and searching sojourn amongst the Philippine Islands.

Species 31. (Fig. *a* and *b*, Mus. Cuming. Vignette, *vide Title-page*, Mus. Stainforth.)

CONUS GLORIA-MARIS. *Con. testâ elongatâ, cylindraceo-turbinatâ, albâ, lineis subtilissimis trigonis rubidis usquequaque reticulatâ, fasciis tribus aurantiis interruptis cinctâ; anfractibus supernè rotundatis; spirâ acuminatâ, apice vix acuto.*

THE GLORY-OF-THE-SEA CONE. Shell long, cylindrically turbinated, white, over entire surface reticulated with the finest possible triangular dull reddish lines, and encircled with three interrupted, orange, blotched bands; whorls rounded at the upper part; spire acuminated, apex scarcely sharp.

CHEMNITZ, Conch., vol. x. p. 73. pl. 143. f. 1324 and 1325.

LAMARCK, Anim. sans vert., vol. vii. p. 526.

Hab. Jacna, Island of Bohol, Philippines (found on the reefs at low water); Cuming.

Having already represented a full-size specimen of this highly esteemed shell on the title-page, I have selected a smaller but more richly-marked example collected by Mr. Cuming at the above island, for the sake of noting its exact place of habitation. I intended to have also figured a very young specimen collected by Mr. Cuming at the same time, scarcely exceeding an inch and a half in length, but the reticulations are so extremely fine as to defy the skill of the lithographer.

Species 32. (Mus. Cuming.)

CONUS MAGNIFICUS. *Con. testâ cylindraceo-turbinatâ, obesâ, anfractibus supernè rotundatis, spirâ lævi, subacuminatâ, apice valdè obtuso; rosaceâ, lineis ovato-trigonis, lacco aut purpureo-rubris, usquequaque reticulatâ, maculis perpaucis grandissimis bifasciatim cinctâ.*

THE MAGNIFICENT CONE. Shell cylindrically turbinated, stout, whorls rounded at the upper part; spire smooth, somewhat acuminated, apex very obtuse; faint rose-colour, reticulated over with ovately-triangular dark lake or purple reddish lines, and doubly banded with one or two very large spots or blotches of the same colour.

REEVE, Pro. Zool. Soc., 1843.

Hab. Matnog, Island of Luzon, Philippines; Cuming.

No one can fail to distinguish this rosaceous stout-shouldered Cone from the well-known *Conus auratus*, to which it is most nearly allied.

Species 33. (Mus. Stainforth.)

CONUS JANUS. *Con. testâ oblongo-turbinatâ, versus basin sulcatâ; spirâ subcanaliculatâ, striatâ, exserto-acutâ; albâ, castaneo longitudinaliter undatâ.*

THE JANUS CONE. Shell oblong, turbinated, grooved towards the base; spire slightly canaliculated, striated, sharply exserted; white, longitudinally waved with chestnut.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 690. pl. 336. f. 5 and 6.

Hab. —— ?

Martini appears to have included this shell with varieties of the *Conus generalis* (Conch., vol. ii. pl. 58.) without noting any specific difference in it.

Species 34. (Mus. Stainforth.)

CONUS MUSTELINUS. *Con. testâ turbinatâ, ad basin striatâ, viridescente-lutea, mediane et supernè albo-fasciatâ, fasciis ambabus serie duplici macularum nigricantium vividè ornatis; spirâ plano-obtusâ, nigro-guttatâ.*

The ermine Cone. Shell turbinated, striated at the base, greenish yellow, white-banded round the middle and upper part, bands ornamented with a double row of vivid black spots; spire flatly obtuse, black-spotted.

Hwass, Enc. Méth. vers, vol. i. part 2. p. 654. pl. 327. f. 6.

Schubert and Wagner, Conch. Cab. Suppl., p. 41. pl. 221. f. 3059 and 3060.

Hab. Islands of Bohol, Ticao, &c., Philippines. (Found in loose sand and coral on the reefs at low water.)

This shell often attains a larger size than that of the specimen selected for illustration, but the spots in that state are much less clearly developed.

Species 35. (Mus. Belcher.)

Conus archon. *Con. testâ conicâ, spirâ concavo-exsertâ, apice acutissimè acuminato; albâ, maculis grandibus flavo-castaneis longitudinaliter nebulosâ, puncticulis albis subdistantibus tæniatis.*

The magistrate Cone. Shell conical; spire concave, exserted, apex very sharply acuminated; white, longitudinally clouded with large yellow chestnut spots, filleted with a number of rather distant white small spots.

Broderip, Pro. Zool. Soc., 1833, p. 54.

Sowerby, Conch. Illus., f. 38.

Hab. Central America; Bay of Montija, Cuming; Gulf of Nicoya, Hinds. (Found in sandy mud in from twelve to eighteen fathoms water.)

The painting of this interesting Cone reminds one somewhat of the *C. cedo-nulli*. Five specimens only were found by Mr. Cuming, and the shell here represented is one of three brought home by Capt. Belcher in the "*Sulphur*."

36b

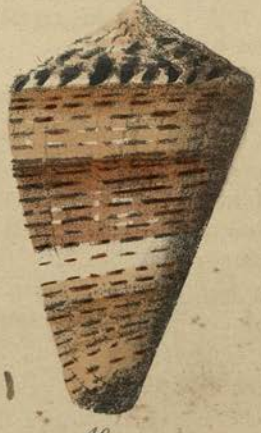
36a

36c

37

38

39



40.

CONUS.

PLATE VII.

Species 36. (Fig. *a*, *b*, *c*, Mus. Cuming.)

CONUS PRINCEPS. *Con. testâ turbinatâ, coronatâ, rosea vel croceâ, fusco longitudinaliter lineatâ aut strigatâ.*

THE PRINCE CONE. Shell turbinated, coronated, rose-colour or yellow, longitudinally lined or streaked with brown.

Variety *a*. (Fig. 36 *a*.)

Testa rosacea, strigis nigro-purpureis subdistantibus, interdum ramosis, vividè virgata.

Shell rose-colour, vividly striped with rather distant, sometimes branched, blackish purple streaks.

LINNÆUS, Syst. Nat., p. 1167.

Conus regius, Chemnitz, Bruguière, Lamarck.

Hab. Bay of Panama; Cuming.

Variety *β*. (Fig. 36 *b*.)

Testa crocea vel flava, lineis castaneis frequentibus, interdum irregularibus, longitudinaliter inscripta.

Shell yellow, longitudinally inscribed with frequent, sometimes irregular, chestnut lines.

BRODERIP (var. *a* and *β*), Pro. Zool. Soc., 1833, p. 55.

SOWERBY, Conch. Illus., 30 *a* and *b*.

Hab. St. Elena, Central America, and Panama; Cuming.

Variety *γ*. (Fig. 36 *c*.)

Testa aurantio-crocea, lineis raris aut obsoletis.

Shell orange-yellow, lines few or obsolete.

BRODERIP, Pro. Zool. Soc., 1833, p. 56.

SOWERBY, Conch. Illus., f. 30.

Hab. Monte Christi, West Columbia; Cuming. (All found in soft and sandy mud in the crevices of rocks.)

The *Conus princeps* has often a very peculiar tufted epidermis; and it sometimes attains a much larger size than that of either of the specimens here figured. Linnæus's description of this shell is so brief and inadequate, that it was supposed by Chemnitz and Bruguière to refer to the little striped variety of the *Conus Hebræus*. In accordance with that impression the species was introduced by those authors under the new title of *Conus regius*, subsequently adopted by Lamarck. It has been ascertained however by Mr. Cuming, on a late visit to Upsal, that the very specimen described by the ancient Professor of that city, still retained in the University Museum, is precisely identical with that here represented at Fig. 36 *a*.

Species 37. (Mus. Stainforth.)

CONUS OBESUS. *Con. testâ obeso-turbinatâ, obsoletè coronatâ, albâ, roseo et violaceo nubeculatâ, punctis niveis, maculisque et punctis nigerrimo-fuscis, profusè pictâ; spirâ concavo-obtusâ, mucronatâ.*

THE STOUT CONE. Shell stoutly turbinated, obsoletely coronated, white, clouded with faint rose and violet, and profusely painted with snowy spots, and very dark spots and blotches; spire concave, obtuse, pointed.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 623.

LAMARCK, Anim. sans vert., vol. vii. p. 453.

Conus Ceylonicus, Chemnitz, Conch., vol. x. pl. 142. f. 1318.

Hab. Ceylon, &c.

The blotches arising from the partial distribution of the spots often assume the arrangement of two obsolete bands, a character least distinctly exhibited in the smallest specimens.

Species 38. (Mus. Cuming.)

CONUS TEREBELLUM. *Con. testâ cylindraceo-turbinatâ, elongatâ, albido-cinereâ aut rubellâ, striis elevatis fasciisque binis cinctâ; spirâ convexâ, obtusissimâ.*

THE BORER CONE. Shell cylindrically turbinated, long, pale ash or reddish brown colour, encircled with two bands and a number of elevated striæ; spire convex, very obtuse.

MARTINI, Conch., vol. ii. pl. 52. f. 577.

GMELIN, Syst. Nat., p. 3390.

Conus terebra, Born, Bruguière, Lamarck.

Hab. Islands of Ticao, Masbate, &c., Philippines; Cuming.

To avoid confusion, I have restored to this well-known shell the original appellation given to it by Martini.

Species 39. (Mus. Stainforth.)

CONUS TERMINUS. *Con. testâ cylindraceâ, elongatâ, lævi, albâ, violaceo-tinctâ, maculis grandibus perpaucis irregularibus, luteo-fuscis, sparsim ornatâ; spirâ convexo-acutâ, canaliculatâ, anfractuum marginibus elevatis.*

THE BORDER CONE. Shell cylindrical, long, smooth white, stained with pale violet, ornamented with a

few large, irregular, scattered, yellowish brown blotches; spire convex and acute; edge of the whorls elevated almost into a border.

Lamarck, Anim. sans vert., vol. vii. p. 505.

Hab. Ceylon, Mauritius, &c.

The base of this shell is strongly striated, and some specimens are ornamented with a number of small, longitudinal, interrupted white flakes.

Species 40. (Mus. Saul.)

Conus splendidulus. *Con. testâ turbinatâ, solidiusculâ, luteo-brunneo alboque alternatim fasciatâ, lineis fuscis, subflexuosis, plus minusve interruptis, vividè cinctâ; spirâ concaviusculâ, acutâ, anfractuum marginibus nigro-guttatis.*

The splendid Cone. Shell turbinated, rather solid, alternately banded with yellowish brown (softening into yellow) and white, and vividly encircled with a number of more or less interrupted, rather flexuous brown lines; spire rather concave and acute; edge of the whorls stained with large black spots.

Sowerby, Conch. Illus., f. 53.

Hab. ——?

I have just received from J. Dennison, Esq. (unfortunately too late for figuring) a beautiful variety of this shell, in which the brown bands are irregularly blotched upon a white ground, without any indication of yellow.

41a

41b

42

43

45a

45b

CONUS.

PLATE VIII.

Species 41. (Fig. *a* and *b*, Mus. Cuming.)

CONUS NICOBARICUS. *Con. testâ turbinatâ, albicante, furvo-nigricante irregulariter reticulatâ, bifasciatâ; spirâ depresso-planâ, coronatâ, apice subelato; anfractibus supernè concavo-canaliculatis; fauce luteâ.*

THE NICOBAR CONE. Shell turbinated, whitish, irregularly reticulated with dusky black, doubly banded; spire flat, depressed; apex somewhat raised; whorls concavely canaliculated round the upper part; interior tinged with yellow.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 612.
LAMARCK, Anim. sans vert., vol. vii. p. 444.
Hab. Island of Nicobar, &c.

This shell approaches very closely to the *C. araneosus*; but may be readily distinguished by the reticulations being always larger and more blotchy; the interior of the latter too never exhibits that warm yellow colour which is so conspicuous in this. Though the reticulated network of the specimen represented at Fig. *a* is exceedingly fine, it is of a totally different character to that of the *Conus araneosus*.

Species 42. (Mus. Cuming.)

CONUS NOCTURNUS. *Con. testâ turbinatâ, albicante, nigerrimo-fusco bifasciatâ; fasciis latissimis, maculis irregularibus albis suprà infràque manentibus; spirâ subdepressâ, apice obtuso.*

THE NOCTURNAL CONE. Shell turbinated, white, doubly banded with dark fuscous black; bands very broad, with irregular white spots remaining above and below them; spire somewhat depressed, apex obtuse.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 611.
LAMARCK, Anim. sans vert., vol. vii. p. 443.
Hab. Molluccas.

The same opinion which I ventured to exercise in describing the Admiral Cone has guided me in my description of this and the proximate species. The ground of the shell is white, as shown by the interior, spire, &c., and the pattern is the dark superficial painting.

Species 43. (Mus. Stainforth.)

CONUS BANDANUS. *Con. testâ turbinatâ, carneâ, nigerrimo-fusco triangulariter reticulatâ, reticulis regularibus; bifasciatâ, fasciâ superiore latiore; spirâ depresso-concavâ, coronatâ, apice subobtuso.*

THE BANDA CONE. Shell turbinated, flesh-colour, triangularly reticulated with very dark brown, reticulations regular; doubly banded, the higher band always the broader; spire depressly concave, coronated, apex rather obtuse.

HWASS, Enc. Méth., vol. i. part 2. p. 611.
LAMARCK, Anim. sans vert., vol. vii. p. 443.
Hab. Philippine Islands, &c.

In the *Coni araneosus* and *Nicobaricus* the lower band is the broader, but in this species it is *vice versâ*. The reticulations of the shell under consideration are, comparatively speaking, very regularly and distinctly portrayed; it may be recognised moreover by its warm fleshy ground colour.

Species 44. (Mus. Stainforth.)

CONUS ARANEOSUS. *Con. testâ turbinatâ, pallidè carneolâ, rubido-fusco confertim et subtilissimè reticulatâ, fasciis duabus vel tribus cingulatâ, infimâ latissimâ; spirâ concavo-depressâ, coronatâ, apice obtuso.*

THE COBWEB CONE. Shell turbinated, pale flesh-colour, very finely and closely reticulated with reddish brown hair lines, and encircled with two or three bands, the lowest of which is the broadest; spire concavely depressed, coronated, apex obtuse.

HWASS, Enc. Méth., vers, vol. i. part 2. p. 612.
LAMARCK, Anim. sans vert. vol. vii. p. 444.
Hab. Ceylon, Philippine Islands, &c.

This shell which often attains a much larger size than that of the specimen here represented, may very fairly be distinguished from the *C. Nicobaricus* to which it is most nearly allied; the reticulations are very much finer, and the spire is not so flat, the shell is moreover of much stouter growth and never exhibits any colour in the interior.

Species 45. (Fig. *a* and *b*, Mus. Cuming.)

CONUS VIDUA. *Con. testâ turbinatâ, albâ, fusco subtilissimè reticulatâ, reticulis ruptis subsparsis; fasciis binis nigerrimo-fuscis, maculis albis sparsis, irregulariter punctatis, cinctâ; spirâ concavo-depressâ, coronatâ, apice subobtuso.*

THE WIDOW CONE. Shell turbinated, white, very finely

reticulated with brown scattered broken lines, and encircled with two broad bands of very dark brown, irregularly dotted and blotched with white spots; spire concavely depressed, coronated, apex rather obtuse.

Reeve, Pro. Zool. Soc., 1843.

Hab. Island of Capul, Philippines (on the reefs); Cuming.

This curiously mottled Cone presents a very different style of painting from any hitherto described species. Several specimens were found by Mr. Cuming, such as the one represented at Fig. *b*, but only one of the age and dimensions of the other.

46a

46b

46c

46d

46e

46f

Bowerbk. del. et lith.

CONUS.

PLATE IX.

Species 46. (Fig. *a* to *g*, Mus. Stainforth and Cuming.)

CONUS CEDO-NULLI. *Con. testâ turbinatâ, aurantiâ, vel olivaceo-fulvâ, vel olivaceo-castaneâ, vel purpureo-nigricante, nigro articulatim punctatâ, maculis albis, disjunctis aut confluentibus, irregulariter pictâ; spirâ concavo-elatâ, indistinctè coronatâ.*

THE MATCHLESS CONE. Shell turbinated, either orange, or olive yellow, or olive chestnut, or purple black, articulately dotted with black, and irregularly painted with white spots, disjoined or flowing together; spire concavely raised, indistinctly coronated.

KLEIN, Tent. Ost., p. 70. No. 46.

BRUGUIERE, Enc. Méth. vers, vol. i. part ii. p. 602. pl. 316. f. 1 to 9.

Hab. West Indies (in deep water).

Such are the normal characters of this far-famed Cone; but so variably are they developed in every specimen I have examined, that to be able to establish a strict conventional set of varieties is beyond all hope. This has been nevertheless attempted; Bruguière in the 'Encyclopédie Méthodique' particularizes nine varieties, and not only enters into an elaborate exposition of each, but distinguishes them by the following titles, *C. c. ammiralis, mappa, Curassuviensis, Trinitarius, Martinicanus, Dominicanus, Surinamensis, Grenadensis* and *Caraccanus*.

By these additional names it would appear that seven varieties out of the nine described by this author, who is strictly followed by Lamarck, are confined to the particular localities which their names indicate. If varieties of the *Conus cedo-nulli* could be defined and shown moreover to be each of local nature, a better mode of arrangement could not well be introduced; but I doubt if this is to be proved. The species is of very rare occurrence, and I must therefore be content to describe the individual specimens before me, believing them to exhibit as great and magnificent varieties of colour and marking as any that have been hitherto collected together.

Variety *a*. (Fig. 46 *a*. Mus. Cuming.)

Testa aurantio alboque nebulosa, aurantio albo-puncticulato, albo aurantio-puncticulato.

Shell clouded with orange and white, the white dotted with orange, the orange dotted with white.

This shell is the most delicate of the series; the colour being light orange upon a faint purplish white ground.

Variety *b*. (Fig. 46 *b*, Mus. Stainforth.)

Testa olivaceo-castanea, nigro alboque articulatim cincta, maculis albis interdum undatim confluentibus.

Shell olive chestnut articulately encircled with black and white, the white spots flowing together in places in a zigzag direction.

The painting of this shell is remarkably striking; the white zigzag and beaded spots, being shaded as it were on the outer side by a black border, appear to stand out in relief upon the rich olive ground. It is very distinct from any variety that has been either figured or described.

Variety *c*. (Fig. 46 *c*, Mus. Stainforth.)

Testa purpureo-alba, maculis punctisque olivaceo-castaneis parcè variegata.

Shell purplish white, sparingly variegated with olive chestnut dots and patches.

The distribution of colour in this shell is not much unlike that in Var. *a*; instead however of being a light bright orange it is a rich dark olive chestnut. This specimen may probably be the *Conus cedo-nulli Caraccanus* of Bruguière, figured by Schubert and Wagner in their Supplement to the 'Conchylien Cabinet,' pl. 220. f. 3054.

Variety *d*. (Fig. 46 *d*, Mus. Cuming.)

Testa olivaceo-fulva, maculis albis, sæpissimè conjunctis, fasciata, puncticulis albis et nigris articulatim cincta.

Shell olive yellow, banded with white spots, for the most part joined together, and articulately encircled with numerous rings of black and white black-bordered dots.

This shell has a lighter ground-colour than that of any except Var. *a* and *b*, the white spots are arranged in narrow bands, and the spire in this specimen is peculiarly depressed.

Variety *e*. (Fig. 46 *e*, Mus. Stainforth.)

Testa purpureo-nigricans, maculis purpureo-albis longitudinaliter confluentibus in medio ornata, puncticulis purpureo-albis et nigris articulatim cincta.

Shell purple-black, ornamented round the middle with

longitudinally zigzag flowing purple-white spots, and articulately encircled with rings of black and purple-white dots.

A dark-jet purple shell of surpassing rarity and beauty, to which neither figure nor description can do justice.

Variety *f*. (Fig. 46 *f*, Mus. Stainforth.)

Testa olivaceo-fulva, maculis irregularibus, purpureo-albis, supernè et in medio fasciata, puncticulis purpureo-albis et nigris articulatim cincta.

Shell olive-yellow, banded round the middle and upper parts with irregular purple-white spots, and articulately encircled with rings of black and purple-white dots.

I believe this variety to be the *Conus cedo-nulli ammiralis* of Bruguière, *Conus cedo-nulli verus seu principalis* of Lamarck, the type of the series and very distinct from any other. The shell here represented, in the finest possible condition, is of a bright olive yellow colour, hence we may infer that Lamarck's cinnamon-coloured specimens (*aurantio-cinnamomea*), figured in Delessert's 'Recueil de Coquilles,' may be worn or discoloured.

Variety *g*. (Fig. 46 *g*, Mus. Stainforth.)

Testa olivaceo-castanea, albo nigro-puncticulato supernè, mediane et infernè fasciata; puncticulis albis et nigris articulatim cincta.

Shell dark olive chestnut, banded round the lower, middle, and upper parts with black-dotted white, and articulately encircled with rings of black and white dots.

There is a rich but smaller specimen of this variety in the magnificent collection of M. B. Delessert at Paris ('Recueil de Coquilles,' pl. 40. f. 7.).

I may be censured probably by many for not adhering to the scale of varieties adopted by Bruguière and Lamarck; few, however, could have laboured more patiently to arrange their specimens in accordance with the views of those authors, and none to less advantage, for the painting of this species is of infinite character and colour.

The *Conus cedo-nulli* being an inhabitant of deep water, and therefore rarely cast ashore, is a shell highly to be prized by collectors; its rarity and surpassing beauty have been expatiated upon by writers from Klein to those of the present day, and it may still be said to merit the title of "*I yield to none.*"

47

48a

48b

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50a

50b

51

ROYAL ASIATIC SOCIETY — LIBRARY OF THE BOMBAY BRANCH OF THE

Sowerby del. et lith.

CONUS.

PLATE X.

Species 47. (Mus. Stainforth.)

CONUS BARBADENSIS. *Con. testâ abbreviato-conicâ, obesâ, coronatâ, spirâ subdepressâ, basi granulatâ; albâ, castaneo-rufescente bifasciatim variegatâ, lineis fuscis brevibus, interruptis, ubique pictâ.*

THE BARBADOES CONE. Shell shortly conical, stout, coronated, spire slightly depressed, base granulated; white, variegated with light reddish chestnut in the form of two bands, and everywhere painted with short, interrupted brown lines.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 632.
LAMARCK, Anim. sans vert., vol. v. p. 457.
SOWERBY, Conch. Illus., f. 105.
Hab. West Indies; Bruguière.

The dark transverse lines are long and well-defined upon the coloured portion of this shell; but on the white ground they are very much broken, and might perhaps with propriety be called linear dots.

Species 48. (Fig. *a* and *b*, Mus. Cuming.)

CONUS GENERALIS. *Con. testâ elongato-conicâ, spirâ acutè angulatâ, apice valdè acuminato; albâ, citrino aut fusco fasciatâ et variegatâ, basi nigrâ.*

THE GENERAL CONE. Shell elongately conical, spire sharply angular, apex very strongly acuminated, white, banded and variegated with brown or citron-colour, base black.

LINNÆUS, Syst. Nat., p. 1166.
LAMARCK, Anim. sans vert., vol. v. p. 464.
Hab. Ceylon, &c.

Variety *a*. (Fig. 48 *a*.)

Testa alba, citrino fasciata, strigis longitudinalibus nigris, undatis, plus minusve ornata.

Shell white, banded with citron-colour, and more or less ornamented with black longitudinal waved streaks.

Variety *β*. (Fig. 48 *b*.)

Testa alba, fusco irregulariter variegata et fasciata.

Shell white, irregularly variegated and banded with dark brown.

I include all the varieties of this species under the two foregoing heads, in order to avoid the confusion that must arise from the too close definition of characters so variable. It approximates very closely to the *C. Maldivus*, but may be for the most part distinguished by its elongated form and more elevated spire.

Species 49. (Mus. Dennison.)

CONUS MALACCANUS. *Con. testâ turbinatâ, lævi, basi sulcatâ, spirâ convexiusculâ, canaliculatâ, apice acutissimè mucronato; albâ, aurantio-helvâ bifasciatâ, fasciâ inferiore, latiore, supèr subtùsque fusco variegatâ, lineisque paucis, fusco alboque articulatis, concatenatis, cinctâ.*

THE MALACCA CONE. Shell turbinated, smooth, base sulcated, spire gently convex, canaliculated, apex very sharply pointed; white, doubly banded with pale orange red, the lower band being the broader, and curiously variegated above and below with dark brown, encircled also with short lines of brown and white articulated and linked together.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 645. pl. 325.
LAMARCK, Anim. sans vert., vol. v. p. 465.
Conus canaliculatus, Chemnitz, Conch., vol. ii. pl. 181. f. 1748 and 1749.
Hab. Straits of Malacca?

I am much indebted to my kind friend J. Dennison, Esq. for the loan of the magnificent shell here represented. The singular style of painting which distinguishes this species is most characteristically portrayed, and the size of the specimen greatly exceeds any that I have hitherto seen.

Species 50. (Fig. *a*, Mus. Belcher; Fig. *b*, Mus. Cuming.)

CONUS OMAICUS. *Con. testâ albicante, maculis aurantio-fuscis, subquadratis, irregularibus, numerosissimis, lineariter dispositis, cingulatâ; macularum lineis sæpè in fasciis duabus vel tribus densissimè approximatis; spirâ subcanaliculatâ, apice mucronato.*

THE ST. OMA CONE. Shell whitish, encircled or studded with a number of irregular square orange-brown spots, arranged in regular transverse lines; the lines of spots often very thickly approximated together in two or three places so as to form bands; spire slightly canaliculated; apex sharp-pointed.

Hwass, Enc. Méth. vers, vol. i. part 2. p. 714. pl. 339. f. 3.

Volute d'Oma ou de St. Thoma, Argenville.

Thalassiarchus Insulæ St. Oma, Martini.

Conus St. Thomæ, Chemnitz.

Hab. Amboyna.

Two magnificent specimens of the *Conus omaicus*, in the finest possible state of preservation, enable me to furnish a more complete illustration of this species than has hitherto been published. In the specimen represented at Fig. *a* the brown spots are small, exceedingly numerous, and disposed in bands, whilst in that represented at Fig. *b* they are broader and more detached. The dark orange brown is the only colour in the shell.

Species 51. (Mus. Saul.)

Conus nebulosus. *Con. testâ obeso-conicâ, subventricosâ, basi sulcatâ; spirâ concavo-elatâ, coronatâ, apice subobtuso; olivaceo-cinereâ, transversim fusco-lineatâ, maculis albis et purpureis variè nebulosâ.*

The clouded Cone. Shell stoutly conical, rather ventricose, base sulcated; spire concavely raised, coronated, apex rather obtuse; olive-ash-coloured, marked across with dark brown lines, and variously clouded with white spots shaded with purple.

Solander, Bruguière, Enc. Méth. vers, vol. ii. part 1. p. 607; Enc. Méth., pl. 317. f. 1.

Lamarck, Anim. sans vert., vol. v. p. 449.

Hab. West Indies.

Being unable to appreciate the varieties of the *Conus nebulosus* noted by Bruguière and Lamarck, I content myself with this single illustration.

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Sowerby del.

Reeve lith.

CONUS.

PLATE XI.

Species 52. (Mus. Cuming.)

CONUS RETICULATUS. *Con. testâ abbreviato-turbinatâ, solidâ, albâ, lineis fuscis, subdistantibus, interdum interruptis, transversè pictâ; interstitiis lineis longitudinalibus brevibus, arcuatis, subirregulariter reticulatâ, reticulis fusco hic illic nebulosis; spirâ convexo-obtusâ, lævi, maculis fuscis reticulatis tessellatâ; basi sulcatâ.*

THE RETICULATED CONE. Shell abbreviately turbinated, solid, white, transversely painted with rather distant chestnut-brown lines, interrupted in places, the interstices between which are somewhat irregularly reticulated with short, curved, longitudinal lines of the same colour, the reticulated spaces being blotched or clouded here and there with chestnut-brown; spire convexly obtuse, smooth, tessellated with blotches of reticulated brown; base grooved.

SOWERBY, Conch. Illus., f. 86.

Conus lucidus ?, Wood (undescribed).

Hab. Island of La Plata (found in coarse sand); Cuming.

I know of no Cone that can be at all confounded with the species under consideration; the brown lines, painted upon a clear, bluish-white ground, look as though they had been ruled by artificial process.

Species 53. (Mus. Cuming.)

CONUS PULCHELLUS. *Con. testâ oblongo-turbinatâ, in medio leviter coarctatâ, furvo-aurantiâ, maculis grandibus sinuatis medianè et supernè ornatâ, punctisque fuscis numerosis ubique seriatim cinctâ; spirâ depressâ, spiraliter canaliculatâ et striatâ; basi pallidè purpureâ, leviter nodulosâ, fauce purpureâ.*

THE PRETTY CONE. Shell oblong-turbinated, slightly contracted in the middle, ornamented round the top and near the middle with a row of large irregularly sinuated white blotches, and encircled throughout with rows of very fine brown dots; spire depressed, spirally canaliculated and striated; base pale purple, slightly nodulous, purple within.

SWAINSON, Zool. Illus., 1st series, vol. ii. pl. 65.

Variety β. (Vide Plate XXIII.)

Testa largior, tumidior, bifasciata, punctis indistinctis; spirâ pallidè purpureâ, non canaliculatâ.

Conus cinctus, Swainson, Zool. Illus., 1st series, vol. ii. pl. 110.

Hab. —— ?

This shell is rarely to be found with its specific peculiarities so distinctly portrayed as in the specimen here figured; Swainson appears indeed to have been singularly misled by it. The sinuated spots are ordinarily clouded into each other, and in var. β. (which is not uncommon in collections) they become altogether lost, assuming the character of a broad uninterrupted band. The shell in this state (var. β.) is the *C. cinctus* of the same author, a name perhaps better known to English collectors than the one I have adopted; the French collectors, however, have it marked *C. pulchellus*, and I follow them in this respect, because I think it prudent to preserve the title of that variety which represents the species in its most characteristic state. My attention was not drawn to the affinity here described until I observed the common variety thus marked in the Paris collections; and as this happened after the accompanying plate was engraved, I must refer the reader to Pl. 23. for a figure and further account of it. The variety in question approaches very closely in form and general appearance to the *C. lineatus* or *vitulinus* (I believe Swainson's *C. vitulinus*, var., pl. 128. of the same series of 'Illustrations' to be nothing more than a pale specimen of the species under consideration), but neither of these Cones exhibit the least indication of that clear bright purple which forms so distinguished an ornament to the *C. pulchellus*.

Species 54. (Mus. Cuming.)

CONUS CAPITANEUS. *Con. testâ turbinatâ, olivaceo-flavidâ, fasciis duabus albis, nigerrimo-fusco-maculatis, lineisque punctatis cinctâ; spirâ obtuso-convexâ, albâ, olivaceo-fusco tessellatâ, punctis striisque corrugatis subtilissimè reticulatâ; basi striatâ, fauce cæruleo-purpureâ.*

THE CAPTAIN CONE. Shell turbinated, olive-yellow, encircled with two white blackish-brown spotted bands and a number of blackish-brown dotted lines; spire obtusely convex, white, tessellated with olive-brown, and very finely reticulated with indented dots and striæ; base striated, bluish-purple within.

LINNÆUS, Syst. Nat. (Gmelin's edit.), p. 3376.

LAMARCK, Anim. sans vert., vol. vii. p. 469.
Hab. Asiatic Seas: Philippine Islands; Cuming.

This species, like all that we have in common, offers innumerable varieties, differing more or less in size, colour, and character of painting; it may nevertheless be identified with tolerable accuracy, though passing very nearly in some instances into *Conus vexillum* or *Sumatrensis.*

Species 55. (Mus. Stainforth.)

CONUS TENDINEUS. *Con. testâ elongatâ, cylindraceâ, transversim striatâ, striis elevatiusculis, interdum granulosis; albidâ aut pallidè violaceâ, castaneo-fusco transversim et longitudinaliter inquinatâ; spirâ convexo-elatâ, apice violaceo, mucronato; basi intus extusque violaceâ.*

THE OUTSTRETCHED CONE. Shell elongated, cylindrical, transversely striated, striæ rather elevated, sometimes granulated; whitish or pale violet-colour, transversely and longitudinally bedaubed with chestnut-brown; spire convexly raised, apex violet, finely pointed; base violet within and without.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 733.
Terebellum violaceum, Chemnitz.

Variety β.

Testa minor, striis subtilioribus, confertis; violaceo-castanea, maculis albis parvis oblongis perpaucis in medio subobliquè cincta.

Shell smaller, striæ much finer and closer; violet-tinged chestnut-brown colour, obliquely encircled round the middle with a very few small white oblong spots.

SOWERBY, Conch. Illus., f. 64.
Hab. Islands of Mauritius, Annaa, &c.

It is a thing of such common occurrence to find the same species of Cone, both smooth and granulated, that I have not thought it necessary to mark these different appearances as special varieties in the *Conus tendineus,* although granulated specimens of this shell are very rarely to be met with. The variety β. above described is curious on account of its uniform dark colour, and the very delicate character of the striæ.

Species 56. (Mus. Cuming.)

CONUS NUSSATELLA. *Con. testâ elongato-cylindraceâ, transversim striatâ, striis elevatiusculis, interdum leviter granulosis; albâ, fulvo vel aurantio nebulatâ, punctis nigerrimo-fuscis ubique seriatim cinctâ; spirâ convexo-exsertâ, apice mucronato.*

THE NUSSATELLA CONE. Shell elongately cylindrical, transversely striated, striæ rather elevated, sometimes slightly granulated; white, clouded with yellow or orange, and everywhere encircled with rows of blackish-brown dots; spire convexly raised, apex finely pointed.

LINNÆUS, Syst. Nat. (Gmelin's edit.), p. 3390.
LAMARCK, Anim. sans vert., vol. vii. p. 515.
Conus terebra, Chemnitz.
Hab. Philippine and Society Islands; Cuming.

This shell is said to have been first found at a small island called the Island of Nussatella; it is abundantly distributed throughout the tropical regions, and exhibits little variation of character. Sowerby distinguishes a small variety found by Mr. Cuming at the island of Annaa, in which the spots are fewer and more distant from each other (vide Pro. Zool. Soc., 1834, p. 18; Conch. Illus., f. 62.); but I do not think it important.

Species 57. (Mus. Cuming.)

CONUS AMABILIS. *Con. testâ turbinatâ, roseâ, purpureo pallidissimè nebulatâ, maculis grandibus albis, triangulariter undatis, supernè et medianè cinctâ, maculis perpaucis quoque, indistinctis, ad basim interdum ornatâ; transversim leviter pertusâ; spirâ obtuso-convexâ, roseo alboque variegatâ, striis punctisque subtilissimè reticulatâ.*

THE LOVELY CONE. Shell turbinated, rose-coloured, very palely clouded or washed with purple, encircled round the middle and upper parts with large white triangularly waved spots, and ornamented at the base also with a very few indistinct spots; slightly pricked across; spire obtusely convex, variegated with rose-colour and white, and very finely reticulated with fine striæ and punctures.

LAMARCK, Anim. sans vert., vol. vii. p. 503.

Variety β.

Testa striis elevatis transversè lirata.

Shell transversely ridged with strong raised striæ.

Hab. Island of Capul, Philippines (found on the reefs); Cuming.

This richly coloured shell approximates very closely to the *Conus pertusus* in its general detail, but I still think Lamarck is right in describing them as separate and distinct species. There is a certain tenuity and graceful contour in the *C. pertusus* which is not to be found in the *C. amabilis,* and a peculiarity in the white-flaked painting of the former serves to distinguish them at a glance. The variety β. above noted, covered with fine ridges, has a very pretty appearance.

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59a

59c

59b

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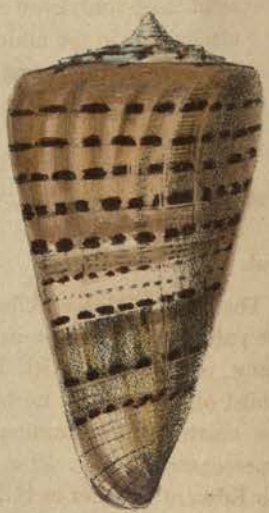

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Sowerby del et lith.

CONUS.

PLATE XII.

Species 58. (Mus. Cuming.)

CONUS VARIUS. *Con. testâ oblongo-turbinatâ, granulatâ, granulis grandibus, subdistantibus; spirâ solidâ, elatâ, coronatâ; albâ, maculis castaneis grandibus variegatâ, interstitiis castaneo punctatis.*

THE FRECKLED CONE. Shell oblong, turbinated, granulated, granules large and rather distant; spire solid, raised, coronated; white, variegated with large chestnut spots, interstices spotted with chestnut.

LINNÆUS, Syst. Nat., 2. p. 1170.

LAMARCK, Anim. sans vert., vol. vii. p. 454; Enc. Méth., pl. 321. f. 3.

Papyrus marmorata, Chemnitz.

Hab. Philippine Islands, &c.

The chestnut spots which ornament this shell, appear to increase gradually in size and intensity of colour, as it advances in growth; and towards the base of the shell they so closely approximate as to assume the nature of a band. The granules are large and of very peculiar character.

Species 59. (Fig. *a*, Mus. Belcher, fig. *b* and *c*, Mus. Stainforth.)

CONUS GUBERNATOR. *Con. testâ elongato-turbinatâ, supernè ventricosâ, solidâ, medio subattenuatâ, basin versus sulcatâ; spirâ concavo-elatâ, canaliculatâ; albâ, maculis fuscis aut purpureis longitudinaliter undatis, variegatâ, eodem colore pallidiore nebulosâ.*

THE GOVERNOR CONE. Shell elongately turbinated, solid, and ventricose round the upper part, slightly attenuated in the middle, grooved towards the base; spire concavely raised, canaliculated; white, variegated with longitudinally waved purple or pinkish brown blotches, and clouded with a faint wash of the same colour.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 727. pl. 340. f. 4 to 6.

Hab. Ceylon, &c.

The form of this species is peculiar and constant, but the painting is variable in the extreme, some specimens being ornamented with large deep-coloured blotches, whilst others exhibit no ornamental character beyond a few scattered longitudinal lines or slips. The variety represented at Fig. 59 *a*, from the collection made by Sir Edward Belcher in H.M.S. *Sulphur*, differs materially from any that I remember to have seen, and is remarkable for its very delicate distribution of light and shade.

Species 60. (Mus. Dennison.)

CONUS IMPERIALIS. *Con. testâ oblongo-turbinatâ, basin versus subangustatâ; spirâ depressâ, tuberculis majusculis coronatâ; albâ, luteo-castaneo bifasciatâ, punctis lineisque solidis interruptis purpureo-nigricantibus cinctâ, cæruleo hic illic tinctâ.*

THE IMPERIAL CONE. Shell oblong turbinated, rather narrowed towards the base; spire depressed, coronated with rather large tubercles; white, encircled with two yellow chestnut bands, and a number of purple black dots and solid interrupted lines of the same colour; stained also here and there with blue.

LINNÆUS, Syst. Nat. (Gmelin) p. 3374.

LAMARCK, Anim. sans vert., vol. vii. p. 445.

Hab. Philippine Islands, &c. (found under stones at low water); Cuming.

The painting of this beautiful shell is certainly of the most elaborate character that can well be conceived.

Species 61. (Mus. Cuming.)

CONUS MONILE. *Con. testâ oblongo-turbinatâ, basin versus angustatâ; spirâ depressâ, subcanaliculatâ, apice mucronato; albidâ, rubello plus minusve tinctâ, maculis lineisque rubido-fuscis seriatim cinctâ.*

THE NECKLACE CONE. Shell oblong turbinated, narrowed towards the base; spire depressed, slightly canaliculated, apex pointed; whitish, more or less stained with a wash of bistre red, and encircled with rows of reddish-brown spots and lines.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 646.

CHEMNITZ, Conch., vol. x. pl. 140. f. 1301 to 1303.

Hab. Ceylon, &c.

In some specimens the spots are slightly extended in a longitudinal direction.

Species 62. (Mus. Cuming.)

CONUS AURORA. *Con. testâ subcylindraceo-turbinatâ, tenui, ventricosâ, lævi; spirâ convexâ, rosaceâ, punctis cinereo-albis, fuscescente pallidè umbratis, sparsim*

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et irregulariter variegatâ, punctis medio et infernè fasciatâ.

The Morning Cone. Shell rather cylindrically turbinated, thin, ventricose, smooth; spire convex, rose-colour, sparingly and irregularly variegated with ashy white dots, palely shaded with faint brown, and encircled round the middle and base with a narrow band of the same spots.

Lamarck, Anim. sans vert., vol. vii. p. 500.

Sowerby, Conch. Illus. *Conus* f. 7.

Conus rosaceus? Chemnitz.

Hab. Cape Natal, Southern Africa; Dr. Kranz.

Chemnitz's figure of this species, quoted by Lamarck, is evidently copied from a worn specimen; it is a light ventricose shell, and cannot well be confounded with any other.

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Sowerby del. & lith.

CONUS.

PLATE XIII.

Species 63. (Mus. Belcher.)

CONUS PATRICIUS. *Con. testâ pyriformi, tumidâ, carneâ, epidermidè luteâ indutâ, spirâ concavo-elatâ, minutè tuberculato-coronatâ, apice valdè acuminato; anfractu ultimo transversè striato, striis leviter undulatis, supernè plicato, infernè valdè attenuato; labro tenui, acuto.*

THE PATRICIAN CONE. Shell pyriform, swollen, flesh-coloured, covered with a smooth, yellow, semi-transparent epidermis; spire concavely raised, minutely coronated with tubercles, apex very sharply acuminated; last whorl transversely striated, striæ slightly waved, plaited round the upper part, very much attenuated towards the lower; lip thin and acute.

HINDS, Ann. and Mag. Nat. Hist., 1843.

Hab. Gulf of Nicoya, Central America (dredged from sandy mud at the depth of seven fathoms); Hinds.

The chief peculiarity of this elegant little shell appears in the angle of the whorls being finely plaited. As one whorl lodges in its turn upon the other, the lower portion of the plaits becomes, of course, concealed, and the spire thus assumes the appearance of being most minutely coronated.

Species 64. (Mus. Belcher.)

CONUS CŒLEBS. *Con. testâ subpyriformi, spirâ lævi, rotundatâ, apice mucronato; albâ, ad apicem basinque violaceâ, epidermide corneâ, olivaceâ, crassâ, indutâ; transversè lineatâ, lineis elevatis, equidistantibus.*

THE BACHELOR CONE. Shell somewhat pyriform, spire smooth, rounded, apex pointed; white, violet at the base and apex, covered with a thick, horny, olive-coloured epidermis; transversely lineated, lines elevated equidistant.

HINDS, Ann. and Mag. Nat. Hist., 1843.

Hab. Ambow, Feejee Islands (found on the coral reefs); Hinds.

The colour and sculpture of this shell are precisely the same as that of the *Conus terebellum*, from which it appears to differ in size, in the short rounded character of the spire, and in the nature of the epidermis. These however are no more than the common indications of early growth, and I now strongly suspect that the *Conus cœlebs* of Mr. Hinds, a shell which, from the deceptive character of its epidermis, I certainly was at one time as much struck with as himself, may prove to be merely a young specimen of the *Conus terebellum*, the epidermis being of the same thick and horny nature as in that species.

Species 65. (Mus. Hinds.)

CONUS MARCHIONATUS. *Con. testâ abbreviato-turbinatâ, lævi, basin versus sulcatâ, albâ, fusco latè reticulatâ; spirâ depressâ, leviter canaliculatâ, spiraliter striatâ; apice mucronato.*

THE MARCHIONESS CONE. Shell shortly turbinated, smooth, grooved towards the base, white, widely reticulated with brown; spire depressed, slightly canaliculated, spirally striated; apex sharp-pointed.

HINDS, Ann. and Mag. Nat. Hist., 1843.

Hab. Port Anna Maria, Nuhuhiva, Marquesas (dredged from a sandy floor at the depth of from seven to ten fathoms); Hinds.

This shell somewhat resembles a small *Conus marmoratus*; it differs however in not being coronated, the spire is more depressed, and the reticulated painting of the shell is more open.

Species 66. (Mus. Rucker.)

CONUS NIMBOSUS. *Con. testâ cylindraceo-turbinatâ, spirâ depressâ, apice mucronato; transversim sulcatâ, sulcis numerosis, angustis; pallidè roseâ, rubido-fusco obsoletè bifasciatâ, punctis lineolisque rufo-purpureis aut fuscis ubique cinctâ; fauce roseâ.*

THE RAINY CONE. Shell cylindrically turbinated, spire depressed, apex pointed; transversely grooved, grooves numerous and narrow; pale rose-colour, faintly banded in two places with reddish brown, and everywhere encircled with brown or reddish purple dots and small lines; interior pink.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 732.

LAMARCK, Anim. sans vert., vol. vii. p. 512; Enc. Méth., pl. 341. f. 5.

Hab. Ceylon.

I know of no species that can be at all confounded with this; the painting is of very peculiar character.

Species 67. (Mus. Taylor.)

CONUS BETULINUS. *Con. testâ obeso-turbinatâ, solidâ,*

basin versus sulcatâ; spirâ rotundatâ, convexiusculâ, fusco vividè maculatâ, apice mucronato; citrinâ, maculis punctisque fuscis variè cinctâ.

THE BUTTER-FIRKIN CONE. Shell stoutly turbinated, solid, grooved towards the base; spire rounded, rather convex, vividly spotted with brown, apex pointed; citron-coloured, variously encircled with brown dots and spots.

LINNÆUS, Syst. Nat. (Gmelin), p. 3383.

MARTINI, Conch., vol. ii. pl. 60. f. 665.

Hab. Ceylon, &c.

Lamarck enumerates six varieties of this well-known species, differing more or less in the number, shape and arrangement of the dots and spots.

Species 68. (Mus. Cuming.)

CONUS TORNATUS. *Con. testâ elongato-turbinatâ, subfusiformi, leviter sulcatâ; spirâ valdè elatâ, turrito-acuminatâ, apice acuto; albâ, fusco-nigricante bifasciatim nebulosâ, punctis fuscis irregularibus ubique cinctâ.*

THE TURNED CONE. Shell elongately turbinated, rather fusiform, slightly grooved; spire very elevated, turrited, apex sharp; white, clouded with blackish brown so as to form two faint bands, and everywhere encircled with rows of dark irregular dots.

BRODERIP, Pro. Zool. Soc., 1833.

SOWERBY, Conch. Illus., f. 25.

Hab. Xipixapi, Central America (found in sandy mud at the depth of from ten to twelve fathoms); Cuming.

The *Conus interruptus*, from which this species may be readily distinguished by the turrited elevation of the spire, is perhaps the nearest allied to it.

Species 69. (Mus. Adamson.)

CONUS FURVUS. *Con. testâ elongato-turbinatâ, angustâ, lævi, spirâ elatâ; luteolâ, fasciis duabus, latis, furvo-fuscis, cingulatâ; aperturâ lineari.*

THE DUSKY CONE. Shell elongately turbinated, narrow, smooth, spire elevated; yellowish, encircled with two broad, dusky brown bands; aperture linear.

REEVE, Pro. Zool. Soc., 1843.

Hab. Islands of Ticao and Masbate, Philippines (found in sandy mud at low water); Cuming.

I kindly thank Mr. Adamson for sending me this new and interesting Cone, a few specimens of which have been collected by Mr. Cuming.

Species 70. (Mus. Dennison.)

CONUS PYRIFORMIS. *Con. testâ symmetricè pyriformi, transversim subtilissimè striatâ, basin versus leviter sulcatâ; anfractibus supernè rotundatis, spirâ convexiusculâ, spiraliter sulcatâ, apice elato, basi paululum recurvâ; albidâ, carneo eximiè tinctâ.*

THE PEAR-SHAPED CONE. Shell symmetrically pyriform, transversely very finely striated, slightly grooved towards the base; whorls rounded superiorly, spire gently convex, spirally grooved, apex raised, base a little recurved; whitish, delicately tinged with flesh-colour.

Hab. Bays of Caraccas and Montija, West Columbia (dredged from sandy mud at the depth of from seven to ten fathoms); Cuming.

This shell attains a much larger size than that of the specimen, which I have here selected on account of the extreme delicacy of its colour.

Species 71. (Mus. Stainforth.)

CONUS ARTOPTUS. *Con. testâ cylindraceâ, angustâ, transversim granoso-striatâ; spirâ convexâ, rotundatâ; albidâ, aurantio-fusco trifasciatim nebulosâ, interstitiis punctatis; aperturâ lineari.*

THE BAKED CONE. Shell cylindrical, narrow, transversely granulously striated; spire convex, rounded; whitish, banded in three places with clouded spots of orange-brown, the interstices being dotted with the same colour; aperture linear.

SOWERBY, Conch. Illus., f. 35.

Hab. ——?

There can be no doubt of the specific importance of this shell; in form it bears some resemblance to the *Conus clavus*, but it differs materially in all other respects from any species of the genus.

72 a.

72 b.

73 a.

74.

73 b.

75 a.

75 b.

Sowerby del.

Reeve lith.

CONUS.

PLATE XIV.

Species 72. (Fig. *a* & *b*, Mus. Cuming.)

CONUS BRUNNEUS. *Con. testâ turbinatâ, crassâ, fortiter coronatâ; fuscâ, maculis albis, longitudinaliter sinuatis, fasciatim dispositis, cinctâ; spirâ subprominulâ, albo fuscoque maculatâ, spiraliter sulcatâ, coronatâ, tuberculis solidis, grandibus; basi lineatâ, lineis elevatis, subgranosis.*

THE BROWN CONE. Shell turbinated, thick, strongly coronated; brown, encircled with two bands of longitudinally sinuated white spots; spire rather prominent, spotted with brown and white, spirally grooved, coronated, tubercles large and solid; base lineated, lines slightly granulous.

WOOD, Ind. Test. Supp., pl. 3. f. 1.

SOWERBY, Pro. Zool. Soc., 1834; Conch. Illus., f. 63.

Variety β. (Fig. 72 *b*.)

Testa crassior, obesior, immaculata, tota fusca, lineis saturatioribus transversis et longitudinalibus vividè picta.

Shell thicker, stouter, entirely brown, vividly painted with transverse and longitudinal lines of a darker brown.

SOWERBY, Pro. Zool. Soc., 1834.

Hab. Puerto Portrero, Panama, and the Gallapagos Islands (found in clefts of rocks); Cuming.

The colour of this shell is a very clear bright brown, and it does not exhibit the slightest tinge of any other colour. The spire varies considerably in its elevation in the two specimens now before me, being much flatter and more depressed in the darker variety; both are remarkably strongly coronated.

Species 73. (Mus. Cuming.)

CONUS AURANTIUS. *Con. testâ oblongo-turbinatâ, coronatâ, transversim seriatim granulatâ; aurantiâ, maculis grandibus perpaucis albis supernè, medianè et infernè cinctâ; granulis hic illic albis; spirâ elatâ.*

THE ORANGE CONE. Shell oblong-turbinated, coronated, transversely granulated; orange, encircled round the upper, lower, and middle parts with large white spots; granules in regular rows, here and there white; spire raised.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 606.

Variety β. (Fig. 73 *b*.)

Testa citrino-fusca, albo-maculata, granulis minoribus.

Shell dark citron-brown, white-spotted, granules smaller.

Hab. Moluccas.

The *Conus aurantius* approximates very closely to the *Conus cedo-nulli* in its varieties of colour and marking; it may, however, be readily distinguished from that species by its more oblong form. In the dark variety the granules are light over the dark painting, and dark over the light spaces.

Species 74. (Mus. Cuming.)

CONUS MARMOREUS. *Con. testâ oblongo-turbinatâ, transversim striatâ, nigro alboque variè marmoratâ, maculis albis sæpissimè subtrigonis; spirâ concavo-canaliculatâ, obtusâ, tuberculis coronatâ, tuberculis ætate interdum subobsoletis.*

THE MARBLE CONE. Shell oblong, turbinated, transversely striated, variously marbled with black and white, white spots generally of a triangular form; spire concavely canaliculated, obtuse, coronated with tubercles, tubercles sometimes nearly obsolete with age.

LINNÆUS, Syst. Nat. (Gmelin's edit.), no. 3374.

LAMARCK, Anim. sans vert., vol. vii. p. 442.

Hab. Chinese Seas.

The spots, though excessively varied in the specimen here figured, are generally more or less cordiform or triangular.

Species 75. (Fig. *a*, Mus. Cuming; Fig. *b*, Mus. Stainforth.)

CONUS VITTATUS. *Con. testâ turbinatâ, fusco-violaceâ aut roseâ, fusco subtilissimè punctatâ, punctis in seriebus parallelis dispositis, zonâ fusco alboque tæniatâ et maculatâ cinctâ; spirâ convexâ, maculis fuscis albisque arcuatis tessellatâ, apice rosaceo.*

THE RIBAND-BOUND CONE. Shell turbinated, brownish-violet or rose-colour, finely dotted with brown; dots arranged in parallel rows, and encircled round the middle and lower parts with a white zone spotted and filleted with brown; spire convex, tes-

sellated with arched spots of white and brown, apex tinged with rose.

Lamarck, Anim. sans vert., vol. vii. p. 470; Enc. Méth., pl. 335. f. 3.

Sowerby, Conch. Illus., f. 21.

Hab. Bays of Panama and Montija, West Columbia (found in coarse sand at the depth of from seven to eleven fathoms); Cuming.

Considerable doubt is still entertained by collectors as to whether the shell here figured is the true *C. vittatus* of Lamarck, on account of its apparent dissimilitude both with his description and the figure to which he refers in Knorr's 'Vernugen.' The fact is, that Lamarck not only described shells in many instances from worn or polished specimens (as his collection, now in the possession of M. Delessert, fully testifies), but referred to bad figures. This was, however, from necessity, not from choice; Lamarck detected in his worn and imperfect specimen of the shell, here figured in its perfection, an indication of characters different from those of any hitherto described species, and he felt confidence in doing what none but the most experienced should hazard. The attentive consideration which has been given by modern travellers to the collection and preservation of shells in a state of perfection, enables us to illustrate the species with a degree of accuracy hitherto unknown; and it is especially pleasing to be able to verify and elaborate, as in the present instance, the surmises of an earlier writer.

76

77a

77b

79a

78

79b

80b

80a

81

80c

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Reeve lith.

CONUS.

PLATE XV.

Species 76. (Fig. 77 *a**, Mus. Belcher.)

CONUS SINENSIS. *Con. testâ obeso-fusiformi, transversim sulcatâ, sulcis interdum latis, subtilissimè pertusis; albidâ, ferrugineo-fusco pallidè maculatâ et variegatâ; labro tenui, acuto, arcuato, juxta spiram emarginato; spirâ valdè elatâ, striatâ, angulato-carinatâ, apice mucronato.*

THE CHINESE CONE. Shell stoutly fusiform, transversely grooved, grooves sometimes broad, very finely pricked; whitish, spotted and variegated with light rusty brown; lip thin, sharp, arched, emarginated next the spire; spire considerably elevated, striated, angularly carinated, apex pointed.

SOWERBY, Conch. Illus., f. 56.

Hab. Feejee Islands (found on a reef); Hinds.

The remarkable elevation of the spire forms a very characteristic peculiarity in this shell. The spots assume a rhomboidal form, separated with some degree of regularity on the upper portion of the shell, but ranging in longitudinal streaks on the lower.

Species 77. (Fig. 77 *b*, Mus. Cuming.)

CONUS ARCUATUS. *Con. testâ obeso-fusiformi, supernè subangulatâ, longitudinaliter striatâ, striis arcuatis; transversim sulcatâ, sulcis angustis, subdistantibus; albidâ, castaneo marmoratâ et strigatâ; labro tenui, acuto, arcuato, juxta spiram emarginato; spirâ elatâ, acutissimè carinatâ, apice valdè exserto.*

THE ARCHED CONE. Shell stoutly fusiform, rather angulated at the upper part, longitudinally striated, striæ arched; transversely grooved, grooves narrow and rather distant; whitish, marbled or streaked with chestnut-brown; lip thin, sharp, arched, and emarginated next the spire; spire elevated, sharply carinated, apex exserted like a fine screw.

BRODERIP and SOWERBY, Zool. Journ., vol. iv. p. 379.

Hab. Near Mazatlan, Pacific Ocean.

The spire is less proportionably elevated in this species than in the preceding, though the first four or five whorls are considerably more erect and pointed. The grooves are not pricked in this shell, and the painting is of a somewhat different style and pattern, more streaked and much more sparingly distributed. The emargination of the lip next the spire, in both, presents a strong indication of the affinity supposed to exist (vide Conch. Syst. vol. ii. p. 269) between the *Cones* and the *Pleurotomæ*.

* [At the time this plate was lithographed, the shell numbered 76 (an obscure variety of the *Conus prælatus*, for an account of which, see Plate XXI.) was thought to be a new species, and those numbered 77 *a* and 77 *b* were supposed to be varieties of one and the same.]

Species 78. (Mus. Cuming.)

CONUS TAHEITENSIS. *Con. testâ subsolido-turbinatâ, transversim striatâ, basem versus sulcatâ, olivaceâ vel violaceo-nigricante, supernè maculis albis grandibus, infernè punctis sparsis ornatâ; spirâ obtuso-convexâ, olivaceo alboque tessellatâ; aperturæ fauce violaceâ.*

THE TAHEITE CONE. Shell rather solidly turbinated, transversely striated, grooved towards the base; olive or blackish violet, ornamented round the upper part with large white spots, round the lower with scattered white dots; spire obtusely convex, tessellated with white and olive; aperture violet within.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 713.

LAMARCK, Anim. sans vert., vol. vii. p. 502.

Variety β.

Testa lævior, in medio albo-maculata, maculis fasciatim commistis.

Shell smoother, white-spotted round the middle, spots intermingled with each other, assuming the nature of a band.

Conus rattus, Lamarck.

Hab. Islands of Taheite, Annaa, &c. (found on the reefs); Cuming.

I have attentively examined the shell described by Lamarck under the title of *C. rattus*, and have no hesitation in pronouncing it to be an ordinary variety of the common *C. Taheitensis*, as above described. The species varies in the size and distribution of the spots, as also in being more or less strongly grooved from the base up, but not considerably.

Species 79. (Fig. *a*, Mus. Cuming; Fig. *b*, Mus. Stainforth.)

CONUS CATUS. *Con. testâ obeso-conicâ, solidiusculâ, basem versus sulcatâ, liris intervenientibus nodulosis; albidâ, olivaceo- vel rubido-fusco variegatâ; spirâ rotundato-convexâ, spiraliter striatâ, striis subprofundè incisis; apice rosaceo, acuto.*

THE CAT CONE. Shell stoutly conical, rather solid, grooved towards the base, intervening ridges nodulous; white, variegated with olive- or reddish-brown; spire rotundately convex, spirally striated, striæ rather deeply cut; apex sharp, rose-colour.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 707.

Variety β.

Testa angustior, punctis lunatis cæruleis et fuscis ornata, liris basalibus vix nodulosis.

Shell narrower, ornamented with numerous lunar-shaped blue and brown specks, basal ridges scarcely nodulous.

Hab. Island of Taheite (found on the reefs); Cuming. West Indies, Senegal, Mauritius; Lamarck.

This shell varies exceedingly, being stouter or narrower, and more or less noduled and specked.

I follow my predecessors in calling it the *cat* Cone, but do not give that word as the translation of *catus*; (*qu.* cautus *a* caveo.)

Species 80. (Fig. *a* & *c*, Mus. Stainforth; Fig. *b*, Mus. Cuming.)

CONUS SPECTRUM. *Con. testâ cylindraceo-turbinatâ, tenui, inflatâ, infernè sulcatâ, sulcis pertusis, subdistantibus; albâ, maculis strigisve aurantiis vel rufo-fuscis, longitudinaliter flexuosis, variè pictâ; spirâ subdepressâ, apice mucronato, elato; aperturâ dehiscente.*

THE SPECTRE CONE. Shell cylindrically turbinated, thin, inflated, lower part grooved, grooves rather distant, faintly pricked; white, variously painted with orange or reddish-brown longitudinally waved spots or streaks; spire rather depressed, apex raised, pointed; aperture gaping.

LINNÆUS, Syst. Nat. (Gmelin's edit.), p. 3395.

LAMARCK, Anim. sans vert., vol. vii. p. 509.

Hab. Mauritius, Molluccas, &c.

A light, open, characteristic species, but which cannot nevertheless be separated without difficulty in many instances from varieties of the *C. stramineus*.

—

Species 81. (Mus. Cuming.)

CONUS GENUANUS. *Con. testâ turbinatâ, fulvo, roseo et cæruleo pallidè tinctâ, tæniis distinctis inæqualibus fusco alboque articulatis cinctâ, tæniis alternis sæpissimè majoribus; spirâ plano-obtusâ, apice mucronato.*

THE GARTERED CONE. Shell turbinated, stained with a faint intermixture of colours, chiefly yellowish-brown, pink, and blue, encircled with a number of distinct unequal fillets of articulated white and dark chocolate-brown, the alternate fillets being generally the larger; spire flatly obtuse; apex pointed.

LINNÆUS, Syst. Nat. (Gmelin's edit.), p. 3381.

LAMARCK, Anim. sans vert., vol. vii. p. 475.

Hab. Molluccas, Senegal; Lamarck. Sierra Leone (found in clefts of rocks); Belcher.

The shell here figured is selected on account of the bright development of its colours. It often exceeds this in size, but I am unacquainted with any large specimen that is not more or less worn or polished. The species is too well known to require any remark, further than that the fillets vary considerably in different individuals, both in width and regularity.

83 a

82

83 b

84 b

84 a

85

87

86

89

88

Sowerby del.

Reeve lith.

CONUS.

PLATE XVI.

Species 82. (Mus. Cuming.)

CONUS OBSCURUS. *Con. testâ oblongâ, tenui, inflatâ, violaceâ, maculis castaneo-fuscis variè nebulatâ, maculis lineis transversis saturatioribus violaceo-punctatis ornatis; spirâ subelatâ, spiraliter striatâ, apice roseo, mucronato; basi eximiè sulcatâ; aperturâ dehiscente, fauce violaceâ.*

THE OBSCURE CONE. Shell oblong, thin, inflated, violet-colour, variously clouded with bright chestnut-brown blotches, blotches ornamented with violet-dotted lines of a darker brown; spire slightly raised, spirally striated; apex rose-colour, finely pointed; base delicately grooved; aperture wide open, violet within.

HUMPHREYS, MSS.

Conus geographus, var., Sowerby, Conch. Illus., f. 26.

Hab. Island of Masbate, Philippines (found under stones on the reefs at low water); Cuming.

As this interesting little shell has been confounded with the *C. geographus*, it is important to note the characters by which it is clearly distinct from that species. In the first place, the violet spaces, which exhibit the ground-colour of the shell, are not painted longitudinally with waved lines; secondly, the spire does not present the slightest indication of being coronated; and thirdly, the shell is finely grooved about one-third up from the base, whilst that part of the *C. geographus* is perfectly smooth, beyond the irregularities occasioned by the ordinary striæ of growth crossing in a contrary direction. It agrees rather in these respects with the *C. tulipa*, but that shell is always more or less indistinctly coronated; the *C. obscurus* has moreover a partially tufted epidermis, and was dredged by Mr. Cuming in places where he did not find a single specimen of either the *Coni tulipa* or *geographus*.

Species 83. (Fig. *a* and *b*, Mus. Stainforth.)

CONUS MERCATOR. *Con. testâ ovato-turbinatâ, basem versus attenuatâ, albicante aut pallidè cæruleâ, fusco fasciatim et variè reticulatâ, fasciarum interstitiis lineis pallidè flavescentibus, subtilissimè undatis, longitudinaliter pictis; spirâ convexo-elatâ, spiraliter striatâ; basi leviter sulcatâ.*

THE MERCHANT CONE. Shell ovately turbinated, attenuated towards the base, whitish or pale blue, reticulated like a band or otherwise with brown, interstices between the bands longitudinally painted with faintly-waved yellowish lines; spire convexly raised, spirally striated; base slightly grooved.

LINNÆUS, Syst. Nat. (Gmelin's edit.), p. 3383.

LAMARCK, Anim. sans vert., vol. vii. p. 483; Enc. Méth., pl. 333. f. 7 and 9.

Hab. West Indies (found at Nevis, on the sands, by Capt. Powers).

The pretty net-work which serves to distinguish this species sometimes covers the shell entirely; it is however rarely to be met with in that state.

Species 84. (Fig. *a*, Mus. Cuming; Fig. *b*, Mus. Stainforth.)

CONUS CYLINDRACEUS. *Con. testâ cylindraceo-fusiformi, transversim subtilissimè striatâ, striis inferioribus fortioribus, granulosis; flavido-fuscâ, albo irregulariter strigatâ; spirâ rotundato-pyramidali, valdè elatâ, apice mucronato.*

THE CYLINDRICAL CONE. Shell cylindrically fusiform, transversely very finely striated, striæ stronger and granulous towards the base; yellowish-brown, irregularly streaked with white; spire rotundately pyramidal, very much elevated; apex pointed.

Variety β. (Fig. *b*.)

Testa rubido-fusca, supernè albo-fasciata, fasciâ lineis fuscis subtilissimis longitudinaliter pictâ.

Shell reddish-brown, upper part encircled with a broad white band, crossed longitudinally with very fine brown lines.

BRODERIP and SOWERBY, Zool. Journ., vol. v. p. 51.

Hab. Ulietea, Society Islands (found on the reefs); Cuming.

The most remarkable feature in this Cone is its very elevated spire, caused by the comparatively rapid descent which each whorl makes in its volution round the pillar.

Species 85. (Mus. Cuming.)

CONUS LEGATUS. *Con. testâ cylindraceo-turbinatâ, angustâ, albo, aurantio, roseoque variegatâ, lineis irregulariter reticulatâ, fusco strigatâ; strigis fuscis*

maculis cordatis, albis, sparsis, vividè notatis; spirâ lævi, apice roseo.

THE AMBASSADOR CONE. Shell cylindrically turbinated, narrow, white, variegated with white, orange and rose-colour, irregularly reticulated with very fine lines, and streaked with brown; streaks vividly marked with small, scattered, white, heart-shaped spots; spire smooth, apex rose-colour.

LAMARCK, Anim. sans vert., vol. vii. p. 523.

Conus musivum, Broderip.

Hab. Philippine Islands (found on the sands); Cuming.

I have selected a small example of this Cone, as exhibiting most distinctly the rich orange-shaded brown streaks characteristic of the species. In larger specimens this peculiarity becomes gradually more obsolete until the species passes into the *C. canonicus*.

Species 86. (Mus. Cuming.)

CONUS ABBREVIATUS. *Con. testâ abbreviato-turbinatâ, solidâ, obsoletè sulcatâ, cæruleo-glaucâ, in medio pallidè fasciatâ, punctis fuscis subdistantibus ubique seriatim cinctâ; spirâ subdepresso-convexâ, obliquè coronatâ; basi attenuatâ, fauce fuscâ.*

THE ABBREVIATED CONE. Shell abbreviately turbinated, solid, obsoletely grooved, bluish-grey, palely banded in the middle, and everywhere encircled with rows of rather distant dark brown dots; spire rather depressly convex, obliquely coronated; base attenuated, brown within.

NUTTALL, MSS.

Hab. Wahoo, Sandwich Islands.

This is a very distinct species, and may be recognised by the neat arrangement of the dark brown dots.

Species 87. (Mus. Cuming.)

CONUS ZEBRA. *Con. testâ oblongo-turbinatâ, infernè angustatâ, albidâ, incarnato pallidè tinctâ, flammis rubido-fuscis longitudinaliter strigatâ; spirâ depresso-convexâ, non striatâ; apice elato; basi sulcatâ.*

THE ZEBRA CONE. Shell oblong, turbinated, narrow towards the base, white, stained with pale flesh-colour, longitudinally streaked with reddish-brown flames; spire depressly convex, not striated, apex raised; base grooved.

LAMARCK, Anim. sans vert., vol. vii. p. 481.

SOWERBY, Conch. Illus., pl. 1. f. 4.

Hab. Salango, Central America (dredged from sandy mud at the depth of twelve to sixteen fathoms); Cuming.

A shell very rarely found in good condition.

Species 88. (Mus. Cuming.)

CONUS BALTEATUS. *Con. testâ abbreviato-conicâ, basem versus sulcatâ, pallidè cæruleo-flavescente, olivaceo-fusco medianè et infernè balteatâ, basi subpurpureâ; spirâ depresso-convexâ, coronatâ, spiraliter striatâ; apice roseo.*

THE BELTED CONE. Shell abbreviately conical, grooved towards the base, pale bluish-yellow, belted round the middle and lower parts with olive-brown; base faintly stained with purple; spire depressly convex, coronated, spirally striated; apex rose-colour.

SOWERBY, Conch. Illus., f. 58.

Hab. Island of Capul, Philippines (found on the reefs); Cuming.

I have no doubt of the specific importance of this shell, though it may be very intimately connected with the *Conus lividus*; it has a very peculiar cast of colour, and the rose-tinted apex is characteristic.

Species 89. (Mus. Cuming.)

CONUS MEDITERRANEUS. *Con. testâ subinflato-turbinatâ, cinereo-virescente, cæruleo, fusco et fulvo variè nebulatâ, lineis albo fuscoque articulatis cinctâ, et pallidè fasciatâ; spirâ convexo-elatâ; basi striatâ, aperturâ leviter dehiscente, fauce violaceo-fuscâ.*

THE MEDITERRANEAN CONE. Shell rather inflately turbinated, ashy green, variously clouded with mixed tints or dashes of blue, brown and yellow, encircled with articulated lines of black and white; and palely banded; spire convexly raised; base striated; aperture rather open, stained with violet-brown.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 701.

LAMARCK, Anim. sans vert., vol. vii. p. 494.

Varieties? { *Conus Jamaicensis*, Lamarck. / *Conus pusio*, Lamarck.

Hab. Mediterranean.

The *C. pusio* and *Jamaicensis* of both M. Delessert's collection (formerly Lamarck's) and of that of the Jardin des Plantes are neither of them anything more than varieties of the *C. Mediterraneus*. I have examined them with attention and am unable to discover the least specific difference. The species under consideration is so well known, that nothing need be added to the above description.

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Sowerby fecit

CONUS.

PLATE XVII.

Species 90. (Mus. Cuming.)

CONUS STERCUS-MUSCARUM. *Con. testâ cylindraceo-turbinatâ, albidâ, seriatim nigerrimo-punctatâ, punctis subquadratis identidem coacervatis, interstitiis sparsim albitæniatis; spirâ convexo-obtusâ, canaliculatâ, apice rosaceo; aperturâ subamplâ, fauce incarnato tinctâ.*

THE FLY-DUNG CONE. Shell cylindrically turbinated, whitish, encircled with rows of jet-black dots, dots somewhat square, here and there heaped together, the spaces being sparingly filleted with opake white; spire convexly obtuse, canaliculated, apex rose-tinted; aperture rather large, interior stained with flesh-colour.

LINNÆUS, Syst. Nat. (Gmelin's edit.), p. 3385.

LAMARCK, Anim. sans vert., vol. vii. p. 511.

Hab. Ceylon, Amboyna, &c.

I have selected three species for illustration in the plate now before me, approximating in some measure in general appearance, but remarkably distinct on examination. They are the *Coni stercus-muscarum, arenatus,* and *pulicarius*; the first may be recognised by its cylindrical form, by the spire not being coronated, and by the small size, dark colour, regularity, and profusion of the dots; the second by its more stout and solid growth, by the spire being very strongly coronated, and by the lighter colour and promiscuously sprinkled character of the dots; and the third by the large size and more sparing distribution of the spots, which are moreover not set in parallel rows as in the first species, from which it further differs in having the spire coronated.

Lamarck particularises a variety of the species under consideration, *C. stercus-muscarum,* with the spots red; but I think he must have described it from a worn specimen. I am not aware of any decided red-spotted variety, analogous, for example, to that of the *Conus eburneus* (vide Plate XIX. f. 106 *a.*).

Species 91. (Fig. *a* & *b*, Mus. Cuming.)

CONUS LUTEUS. *Con. testâ elongato-turbinatâ, basim versus attenuatâ; luteâ, monilibus castaneis, exilibus, cinctâ, maculisque nigro-castaneis albo eximiè limbatis, in spiram et in anfractûs medium tessellatâ; spirâ obtuso-productâ, apice mucronato.*

THE YELLOW CONE. Shell elongately turbinated, attenuated towards the base; pale yellow, encircled with faint chestnut necklace belts, and tessellated on the spire and middle of the shell with dark spots delicately edged with white; spire obtusely produced, apex pointed.

BRODERIP, Pro. Zool. Soc., 1833.

SOWERBY, Conch. Illus., f. 8*.

Variety β. (Fig. 91 *a.*)

Testa rosacea. Shell rose-colour.

SOWERBY, Conch. Illus., f. 8.

Hab. Island of Annaa, Pacific Ocean (found on the reefs); Cuming.

The following excellent account of the *Conus luteus* by Mr. Broderip will assist greatly in identifying it:—

"The spire of this species, though full and rounded, terminates in a short acute point. The shell tapers rapidly towards the base. When in perfection, its rich saffron-colour, girt with numerous delicate necklaces, and the broad belt of interrupted tessellated spots of the darkest chestnut, bordered with the purest white, give it a very beautiful appearance. The tessellated spots are so regularly set on the whorls of the spire as to look like mosaic work."

The author here quoted seems not to have been acquainted with the var. β, or he would have selected probably a more appropriate specific title for this shell. The *rose*-colour variety of the *yellow* Cone is rather anomalous reading; he might be reminded of the force and accuracy of the following observations made by him in the same memoir in which the species occurs:—"Colour will be found in many species to be the result of locality, food or temperature."

Species 92. (Mus. Dennison.)

CONUS ARENATUS. *Con. testâ obeso-turbinatâ, albâ, punctis minutis rubido-fuscis acervatim conspersâ; punctis interdum, autem rarò, fasciatim dispositis; spirâ convexo-planulatâ, fortiter coronatâ, apice mucronato; aperturæ fauce pallidè incarnato tinctâ.*

THE SANDY CONE. Shell stoutly turbinated, white, promiscuously sprinkled with small reddish-brown dots; dots sometimes, but rarely, disposed in bands; spire convexly flat, strongly coronated, apex pointed; faintly stained with flesh-colour within the aperture.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 621.
LAMARCK, Anim. sans vert., vol. vii. p. 452.
Conus stercus-muscarum, var., Linnæus.
Hab. Ceylon, &c.

Linnæus seems to have regarded this shell as a coronated variety of the *C. stercus-muscarum*; a proper examination of the form of the shell, and of the character and distribution of the dots, will, however, convince the most sceptical enemy to species-founding that it is specifically distinct.

Species 93. (Fig. *a* and *b*, Mus. Cuming.)

CONUS BULLATUS. *Con. testâ cylindraceo-ovatâ, ventricosâ, puniceo et albo plus minusve fasciatim variegatâ; spirâ depressâ, planiusculâ, apice elato, acuto; aperturâ leviter inflatâ, fauce puniceo tinctâ.*

THE BUBBLE-LIKE CONE. Shell cylindrically ovate, ventricose, variegated with white and scarlet, more or less disposed in bands; spire depressed, rather flat, apex raised and sharp-pointed; aperture rather inflated, stained within with scarlet.

LINNÆUS, Syst. Nat. (Gmelin's edit.), p. 3395.
LAMARCK, Anim. sans vert., vol. vii. p. 510.
Hab. Molucca and Philippine Islands, &c.

Variety β. (Fig. 93 *b*.)

Testa pallidior, tæniis puniceo et albo articulatis, cincta.

Shell paler, encircled with fillets of articulated white and scarlet.

No one can fail to recognise this beautiful shell, peculiar in its form, as well as in its delicate style of colouring.

Species 94. (Mus. Cuming.)

CONUS PULICARIUS. *Con. testâ turbinatâ, albâ, interdum ferrugineo-aurantio pallidè fasciatâ aut strigatâ, guttis nigris subovalibus, infernè coacervatis, vividè pictâ; spirâ subdepressâ, coronatâ, apice mucronato.*

THE FLEA-BITTEN CONE. Shell turbinated, white, sometimes faintly streaked or banded with pale rusty-orange, and vividly painted with rather oval black spots, heaped together towards the base of the shell; spire rather depressed, coronated, apex pointed.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 622.
LAMARCK, Anim. sans vert., vol. vii. p. 453.

Variety β.

Testa plerumque minor, guttis majoribus, deformibus, interdum confluentibus.

Shell generally smaller, with the spots larger, more irregularly shapen and sometimes flowing together.
Conus fustigatus, Hwass, Bruguière, Lamarck.
Hab. Molucca and South Pacific Islands. Island of Taheite (found on the reefs); Cuming.

The *Conus fustigatus* of the authors above-quoted is no other than an ordinary variety of the species under consideration, differing in the comparative irregularity of the spotting.

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Sowerby fecit.

CONUS.

PLATE XVIII.

Species 95. (Mus. Stainforth.)

CONUS MACULIFERUS. *Con. testâ abbreviato-turbinatâ, subventricosâ; albâ, maculis grandibus aurantio-fuscis longitudinaliter confluentibus, biseriatim dispositis, vividè pictâ; basi striatâ, rosaceâ; spirâ subdepressâ, eximiè coronatâ, apice rosaceo.*

THE BLOTCHED CONE. Shell shortly turbinated, slightly ventricose; white, vividly painted with two rows of large longitudinally flowing orange-brown blotches; base striated; spire rather depressed, delicately coronated, apex rose-colour.

SOWERBY, Conch. Illus., f. 23.

Hab. ——?

This is a very distinct species, and one which cannot fail to be appreciated.

Species 96. (Mus. Stainforth.)

CONUS SPHACELATUS. *Con. testâ turbinatâ, solidiusculâ, transversim exiliter liratâ; albâ, maculis grandibus olivaceis, biseriatim dispositis, vividè pictâ; spirâ obtuso-elatâ, eximiè coronatâ, apice rosaceo.*

THE MORTIFIED CONE. Shell turbinated, rather solid, transversely very faintly ridged; white, vividly painted with two rows of large olive blotches; spire obtusely elevated, delicately coronated, apex rose-colour.

SOWERBY, Conch. Illus., f. 51.

Hab. ——?

The general character of the painting of this species is not much unlike that of the preceding, inasmuch as it presents a double row of large coloured blotches upon a white ground; and a resemblance may also be observed in the spire of both shells being finely coronated and rose-tinted at the apex; the *Conus sphacelatus* differs however from the *Conus maculiferus* in form, solidity, and other minor particulars.

Species 97. (Mus. Stainforth.)

CONUS COLUMBA. *Con. testâ obeso-turbinatâ, solidâ, basim versus profundè sulcatâ; albâ, interdum, autem rarò, maculis fuscis perpaucis, sparsis, pallidè tinctâ; spirâ convexâ, canaliculatâ.*

THE DOVE CONE. Shell stoutly turbinated, solid, deeply grooved towards the base; white, sometimes, but rarely, stained with a very few scattered faint brown spots; spire convex, canaliculated.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 709.

LAMARCK, Anim. sans vert., vol. vii. p. 499.

Hab. West Indies.

I believe the shell figured in the Encyclopédie Méthodique, pl. 331. f. 3, noted by Lamarck as a large variety of this species, to be the *Conus lacteus*.

Species 98. (Mus. Stainforth.)

CONUS PICTUS. *Con. testâ oblongo-turbinatâ, tenuiculâ, subventricosâ, puniceo brunneove et albo alternatim fasciatâ, fasciis interstitiisque fusco alboque identidem tæniatâ et variegatâ; spirâ convexo-elatâ, ad marginem peculiariter strigatâ, aperturâ subinflatâ.*

THE PAINTED CONE. Shell oblong-turbinated, rather light and ventricose, alternately banded with palish scarlet or brown, the bands and interstices being here and there filleted and variegated with brown or brownish-scarlet and white; spire convexly raised, the edge being peculiarly streaked.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

The painting of this pretty shell is of very peculiar character, and I know of no other species with which any comparison can well be instituted. The most characteristic of two specimens now before me exhibits (vide Fig. 98.) three broad pale scarlet bands, the lower being ornamented with two articulated fillets of brown and white, the middle with one only, whilst in the upper band the fillet is altogether wanting. The spaces between the bands are curiously variegated with brown (scarlet-brown), and the base and upper edge of the shell are obliquely streaked with the same colour; the latter part in such a manner as to leave a neat spiral necklace of short streaks upon the surface of the spire. This is however too detailed a description to apply correctly to the second specimen (from Mr. Cuming's collection), in which the articulated fillets are more confused, though the necklace of short streaks is as clearly defined around the edge of the spire.

I have adopted the same specific title for this shell which has been used by Mr. Stainforth in manuscript to

distinguish it, and feel much indebted to him for allowing me to describe and figure it.

Species 99. (Mus. Stainforth.)

CONUS SULCATUS. *Con. testâ turbinatâ, transversim sulcatâ, sulcis plus minusve distantibus, liris intermediis nunc planis, nunc rotundatis; albidâ, fuscescente variè tinctâ et strigatâ; spirâ depresso-convexâ, indistinctè coronatâ, canaliculatâ, spiraliter striatâ, interstitiis leviter pertusis; apice mucronato, acuto.*

THE GROOVED CONE. Shell turbinated, transversely grooved, grooves more or less distant, intermediate ridges sometimes flat, sometimes rounded; whitish, variously stained and streaked with pale brown; spire depressly convex, indistinctly coronated, canaliculated, spirally striated, interstices between the striæ faintly pricked; apex sharp-pointed.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 618.

LAMARCK, Anim. sans vert., vol. vii. p. 451.

Variety β.

Testa liris scabris aut granulosis.

Shell with the ridges rough or granulous.

Conus costatus, Chemnitz.

Conus asper, Lamarck.

The title of *sulcatus*, proposed for this shell by M. Hwass, was published by Bruguière in the Encyclopédie Méthodique about three years before the appearance of Chemnitz's description of it in the last volume of the 'Conchylien Cabinet,' under that of *costatus*.

Species 100. (Mus. Stainforth.)

CONUS MITRATUS. *Con. testâ cylindraceo-elongatâ, transversim striatâ, exiliter granulosâ; exusto-luteâ, maculis grandibus fuscis trifasciatâ; spirâ obtuso-pyramidali, fusco tessellatâ, apice elato, acuto.*

THE MITRED CONE. Shell cylindrically elongated, transversely striated, very finely granulated; burnt-yellow colour, encircled with three bands of large brown spots; spire obtusely pyramidal, tessellated with brown, apex elevated and sharp.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 738.

LAMARCK, Anim. sans vert., vol. vii. p. 514.

Hab. Island of Ticao, Philippines (found on the reefs); Cuming.

This shell is peculiar in having its entire surface covered with very fine granules.

Species 101. (Fig. *a* and *b*, Mus. Deshayes.)

CONUS HIEROGLYPHICUS. *Con. testâ cylindraceo-ovatâ, cinereo-violaceâ, macularum fasciis duabus ornatâ, maculis niveis, peculiariter sinuosis; granulosâ, granulis pallidis; spirâ convexo-acutâ, variegatâ; basi striatâ.*

THE HIEROGLYPHICAL CONE. Shell cylindrically ovate, ashy-violet colour, ornamented with two bands of white peculiarly sinuated spots; granulous, granules pale; spire convexly acute, variegated; base striated.

DUCLOS, Mag. de Zool., 1833, pl. 23.

Hab. —— ?

I feel exceedingly obliged to M. Deshayes for the loan of this interesting Cone, because it enables me to expose one of the most flagrant examples of dishonesty that ever disgraced the annals of conchological science. The shell now before me was borrowed of M. Deshayes by M. Duclos under the pretext of comparing it with a specimen of much larger dimensions in his own cabinet. There was no such specimen, however, in existence; the drawing given by M. Duclos as of one in his collection is indisputably a magnified representation of this, so that he adopted this discreditable manœuvre merely to gain the credit of having introduced a new species of Cone. I should not have ventured to publish or to speak so positively of this notorious imposition; but there are certain particular marks in the figure and in the shell by which it may be detected. I am thus obliged to believe as true (and in duty bound to expose), what I have hitherto ridiculed as incredible.

Species 102. (Mus. Stainforth.)

CONUS CARDINALIS. *Con. testâ turbinatâ, subobsoletè granulosâ; coccineâ, in medio albifasciatâ, fasciâ fusco sparsim maculatâ; spirâ convexo-obtusâ, albâ, eximiè coronatâ.*

THE CARDINAL CONE. Shell turbinated, rather obsoletely granulous; pinkish scarlet, encircled round the middle with a white band sparingly spotted with brown; spire convexly obtuse, white, delicately coronated.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 632.

LAMARCK, Anim. sans vert., vol. vii. p. 458.

Hab. —— ?

A remarkably pretty Cone, on account of the extreme delicacy of its colour.

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106a

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104b

106b

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CONUS.

PLATE XIX.

Species 103. (Mus. Stainforth.)

CONUS MUS. *Con. testâ ovato-turbinatâ, transversim striatâ, striis elevatis; cinereâ, albo-fasciatâ, maculis fulvis longitudinaliter dispositis, ornatâ; spirâ obtuso-convexâ, variegatâ.*

THE MOUSE CONE. Shell ovately turbinated, transversely striated, striæ raised; ash-colour tinted with blue or olive, banded round the middle, or rather below the middle, with white, and ornamented with yellowish-brown spots arranged one under the other in longitudinal streaks; spire obtusely convex, variegated.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 630.

LAMARCK, Anim. sans vert., vol. vii. p. 457.

Hab. West Indies.

The yellowish-brown colour of this shell, which is deposited in blots round the top of the whorl, looks as if it had run over, touching the raised lines down the shell in streaks, and shading the interstices. The interior of the shell is generally stained with dark chocolate-brown.

Species 104. (Fig. *a*, Mus. Stainforth; Fig. *b*, Mus. Dennison.)

CONUS HEBRÆUS. *Con. testâ obeso-turbinatâ, solidâ, basim versus leviter liratâ; albidâ aut albido-roseâ, maculis grandibus nigris rhomboideis, fasciatim digestis, vividè pictâ; spirâ obtuso-convexâ, subindistinctè coronatâ, maculis tessellatâ.*

THE HEBREW CONE. Shell stoutly turbinated, solid, slightly ridged towards the base; white or rose-tinted, vividly painted with large rhomboidal black spots, arranged across the shell in bands; spire obtusely convex, somewhat indistinctly coronated, tessellated with spots.

LINNÆUS, Syst. Nat. (Gmelin's edit.), p. 3384.

LAMARCK, Anim. sans vert., vol. vii. p. 451.

Variety β. (Fig. 104 *a*)

Testa maculis nigris longitudinaliter confluentibus.

Shell with the black spots flowing longitudinally into each other.

Conus vermiculatus, Lamarck.

Hab. Ceylon, &c.

Bruguière was undoubtedly right in describing the shell which Lamarck subsequently distinguished with the new specific title of *vermiculatus*, as a variety of the *C. Hebræus*; the spots vary exceedingly, flowing sometimes into each other transversely as well as longitudinally. The shell in all other respects remains the same, though it exhibits a very notable variety of marking. It is sometimes granulated.

Species 105. (Mus. Diamond.)

CONUS PURPURASCENS. *Con. testâ subobeso-conicâ, interdum leviter granulosâ; violaceâ, purpureo variegatâ et nebulosâ, monilibus purpureis et albis frequentibus cingulatâ; aperturâ subamplâ, labri limbo interno purpureo tincto; spirâ convexâ, subcanaliculatâ, spiraliter striatâ.*

THE PURPLE CONE. Shell rather stoutly conical, sometimes slightly granulous; violet-colour, clouded and variegated with dark purple, and encircled with a number of fine necklaces of purple and white; aperture rather large, inner edge of the lip stained with purple; spire convex, slightly canaliculated, spirally striated.

BRODERIP, Pro. Zool. Soc., 1833.

SOWERBY, Conch. Illus., f. 13.

Hab. Panama (found in the clefts of rocks); Cuming. St. Blas, Mexico; Hinds.

There is a peculiarity in this shell beyond the colour and character of the painting, in the broad canaliculated ledge which is formed by each whorl at its junction with the spire, giving an unusual width to the upper portion of the aperture.

Species 106. (Fig. *a* and *b*, Mus. Stainforth.)

CONUS EBURNEUS. *Con. testâ subobeso-turbinatâ, solidâ; albâ, zonis tribus pallidè aurantio-fuscis, maculisque nigris subquadratis seriatim cinctâ; spirâ depresso-planâ, sulcis exilibus duabus spiraliter incisâ.*

THE IVORY CONE. Shell rather stoutly turbinated, solid; white, encircled with three pale orange-brown bands, and a number of squarish black spots set in parallel rows; spire depressly flat, spirally engraved with two light grooves.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 640.

LAMARCK, Anim. sans vert., vol. vii. p. 463.

Variety β. (Fig. 106 *a*.)

Testa fasciis aurantio-fuscis nullis; maculis rubido-cinnamomeis, numerosioribus.

Shell with no orange-brown bands; spots reddish cinnamon-colour and more numerous.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 641.

LAMARCK, Anim. sans vert., vol. vii. p. 463.

Hab. Ceylon, &c.

The reddish cinnamon variety of the *C. eburneus*, accurately described by Bruguière in the 'Encyclopédie Méthodique,' is a remarkable one, and difficult to recognise as belonging to this species. The shells of both varieties agree, however, in respect to form, and particularly in the double spiral groove which characterizes the spire.

Species 107. (Mus. Stainforth.)

CONUS TÆNIATUS. *Con. testâ subabbreviato-turbinatâ, albâ, pallidè amethystino-zonatâ, tæniis nigro alboque articulatis vividè cinctâ; spirâ obtuso-convexâ, variegatâ, indistinctissimè coronatâ.*

THE FILLETED CONE. Shell rather shortly turbinated, white, zoned with pale amethyst-colour, and vividly encircled with fillets of articulated black and white; spire obtusely convex, very indistinctly coronated.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 628.

LAMARCK, Anim. sans vert., vol. vii. p. 456.

Hab. Chinese Seas.

This shell is not very much unlike the *C. genuanus*; it is however smaller, and the articulated fillets are depicted with a far greater degree of regularity.

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ROYAL ASIATIC SOCIETY LIBRARY ON THE BOMBAY BRANCH OF THE

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Sowerby fecit

CONUS.

PLATE XX.

Species 108. (Mus. Stainforth.)

CONUS PAUPERCULUS. *Con. testâ turbinatâ, tenuiculâ; pallidè olivaceâ, balteo pallidè incarnato, subcentrali, punctisque rubidis subquadratis, lineariter digestis, cinctâ; spirâ subelatâ, rubido-fusco arcuatim strigatâ.*

THE MEAN-LOOKING CONE. Shell turbinated, rather thin, pale olive-colour, encircled with a nearly central belt of pale flesh-colour and a number of square reddish-brown dots ranged in transverse lines; spire a little raised, ornamented with arched streaks of reddish-brown.

SOWERBY, Conch. Illus., f. 78.

Hab. ——?

This is a very distinct species; I know of no other with which a comparison can be drawn with any advantage.

Species 109. (Mus. Cuming.)

CONUS SPONSALIS. *Con. testâ obeso-turbinatâ, solidâ, lævi, basim versus granulosâ; albidâ aut pallidè luteolâ, maculis roseis oblongis, longitudinaliter confluentibus, bifasciatâ; spirâ subelatâ, coronatâ, apice acuto; basi et aperturæ fauce violaceo-nigricante.*

THE BRIDAL CONE. Shell stoutly turbinated, solid, smooth, granulated towards the base; white or pale yellow, encircled with two bands of oblong rose-coloured spots flowing longitudinally; spire rather raised, coronated, apex sharp; base and interior of the shell stained with very dark violet.

CHEMNITZ, Conch. Cab., vol. xi. pl. 182. f. 1766 and 1767.

LAMARCK, Anim. sans vert., vol. vii. p. 459.

Hab. Lord Hood's and other Islands, Pacific Ocean (found in pools on coral reefs); Cuming.

No one can fail to recognise this stout, pretty little shell.

Species 110. (Mus. Cuming.)

CONUS NUX. *Con. testâ obeso-turbinatâ, lævi, basim versus granuloso-striatâ, granulis subobsoletis; albâ, maculis citrinis undatis bifasciatâ; spirâ depresso-convexâ, apice subobtuso, basi et aperturæ fauce violaceo-nigricante.*

THE NUT CONE. Shell stoutly turbinated, smooth, granulously striated towards the base, granules somewhat obsolete; white, encircled with two bands of dark waved citron-coloured blotches; spire depressly convex, apex rather obtuse; base and interior of the shell stained with violet.

BRODERIP, Pro. Zool. Soc., 1833.

SOWERBY, Conch. Illus., f. 31.

Hab. Gallapagos Islands.

"In some individuals," says Broderip, "the brown (or dark citron-colour) predominates to the exclusion of the white, save a few scattered spots or flakes."

Species 111. (Mus. Stainforth.)

CONUS TIMORENSIS. *Con. testâ subcylindraceo-turbinatâ, lævi, basim versus striatâ; albâ, incarnato-roseo nebulosâ, lineis roseis transversis, plus minusve interspersâ, zonâ albâ intermediâ, obsoletâ, sæpissimè formante; spirâ leviter canaliculatâ, apice acuto; aperturâ subamplâ.*

THE TIMOR CONE. Shell rather cylindrically turbinated, smooth, striated towards the base; white, clouded with faint fleshy rose-colour more or less interspersed with interrupted transverse lines of a darker rose-colour, generally forming an obsolete intermediate white zone; spire slightly canaliculated, apex sharp; aperture rather large.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 731.

LAMARCK, Anim. sans vert., vol. vii. p. 511.

Conus vespertinus, Humphreys (Sow. Tank. Cat.).

Hab. Island of Timor, Moluccas, &c.

The interrupted transverse lines which adorn this delicately painted shell are sometimes very feebly portrayed.

Species 112. (Mus. Cuming.)

CONUS MURICULATUS. *Con. testâ turbinatâ, muriculato-granulatâ, granulis prominentibus, subdistantibus, seriatim digestis; albâ, fasciis latis luteo-fuscis duabus cinctâ, fasciis lineis filosis ornatis; spirâ depresso-convexâ, coronatâ, rubido-fusco maculatâ; basi et aperturæ fauce violaceâ.*

THE PRICKLY CONE. Shell turbinated, prickly granulated, granules prominent and rather distant, set in rows; white, encircled with two broad yellowish-brown bands, bands ornamented with fine thread-like lines; spire depressly convex, coronated, spotted with reddish-brown; base and within the aperture violet.

SOWERBY, Conch. Illus., f. 1.

Hab. Island of Masbate, Philippines (found on coral reefs); Cuming.

This shell appears to be somewhat partially granulated; the granules are however strong, and very characteristically developed.

Species 113. (Mus. Cuming.)

Conus musicus. *Con. testâ turbinatâ, albidâ, cinereo pallidè zonatâ, lineis transversis interruptis nigerrimo-fuscis cinctâ; spirâ planiusculâ, nigerrimo-fusco maculatâ; aperturæ fauce nigricante-violaceo tinctâ.*

The music-score Cone. Shell turbinated, whitish, zoned with a pale washy ash-colour, and encircled with transverse interrupted blackish-brown lines; spire rather flat, spotted with blackish-brown; interior stained with blackish-violet.

Hwass, Enc. Méth. vers, vol. i. part 2. p. 629.

Lamarck, Anim. sans vert., vol. vii. p. 456.

Hab. West Indies; Captain Powers.

I have every reason to believe that the locality mentioned by Lamarck for this species, quoted from Bruguière, is incorrect.

Species 114. (Mus. Deshayes.)

Conus daucus. *Con. testâ turbinatâ, ad basim leviter sulcatâ; aurantio-rubrâ, maculis pallidulis, punctisque rubido-fuscis sparsis, seriatim dispositis, plus minusve cinctâ; spirâ depressâ, maculis pallidulis rubidisque arcuatis tessellatâ; apice roseo.*

The wild-carrot Cone. Shell turbinated, slightly grooved at the base; orange-red, more or less encircled with rows of palish spots and scattered reddish-brown dots; spire depressed, tessellated with arched spots of pale and reddish-brown; apex rose-tinted.

Hwass, Enc. Méth. vers, vol. i. part 2. p. 651.

Lamarck, Anim. sans vert., vol. vii. p. 468.

Sowerby, Conch. Illus., f. 27.

Conus Arausiensis, Chemnitz.

Hab. Seas of America; Lamarck.

This shell is rarely to be met with in good condition; the specimen here figured, kindly lent to me by M. Deshayes, is the best I have seen, though not displaying much variety of character in the painting.

Species 115. (Fig. 115 *a*, Mus. Cuming.)

Conus Mindanus. *Con. testâ turbinatâ, basim versus profundè sulcatâ; pallidè incarnatâ, puniceo variegatâ et nebulosâ, punctis lineolisque rufis exilissimis seriatim cinctâ; spirâ acuminatâ, indistinctè coronatâ, punctorum serie unicâ prope suturam ornatâ.*

The Mindanao Cone. Shell turbinated, deeply grooved towards the base; pale flesh-colour clouded and variegated with scarlet, and encircled with rows of exceedingly fine dots and lines of red; spire acuminated, indistinctly coronated, and ornamented with a row of fine red dots near the suture.

Variety β. (Fig. 115 *b*, Mus. Deshayes.)

Testa granulosa, granulis subdistantibus, prominentibus; spirâ valdiùs coronatâ, tuberculis granulisque albis.

Shell granulated, granules prominent and rather distant; spire more strongly coronated; tubercles and granules white.

Hwass, Enc. Méth. vers, vol. i. part 2. p. 711.

Lamarck, Anim. sans vert., vol. vii. p. 498.

Conus Elventinus, Duclos.

Hab. Island of Mindanao, Philippines; Hwass.

The locality from which this shell receives its title is quoted by Lamarck and others on the sole testimony of M. Hwass, published fifty years ago in the 'Encyclopédie Méthodique.' During Mr. Cuming's late researches at Mindanao and other islands of that prolific group, not a single specimen was found.

Species 116. (Mus. Cuming.)

Conus punctículatus. *Con. testâ subobeso-turbinatâ, solidâ, basim versus leviter sulcatâ; albidâ, punctorum fuscorum seriebus approximatis, flammis cæruleo-fuscis, longitudinalibus, subindistinctis, ornatâ; spirâ convexo-acutâ; aperturæ fauce pallidè violaceâ.*

The small dotted Cone. Shell rather stoutly turbinated, solid, lightly grooved towards the base; whitish, painted with close-set rows of brown dots and rather indistinct longitudinal flames of bluish-brown; spire convexly acute; interior of the aperture pale violet.

Variety β.

Testa obesior, pallidè cæruleo-cinerea, granulosa, punctis pallidioribus, flammis longitudinalibus nullis.

Shell stouter, pale bluish ash-colour, dots paler, no longitudinal flames.

Hwass, Enc. Méth. vers, vol. i. part 2. p. 704.

Hab. Salango and St. Elena, West Columbia (found in sandy mud at the depth of from five to nine fathoms); Cuming.

The title of *C. millepunctatus*, given to this shell by Chemnitz, is retained for the large species allied to the *C. literatus*, vulgarly called "*Le Tigre mille points*" by Favanne and others.

117

118a

118b

119

120a

120b

121

Sowerby. del. et lith.

prel. Lith. Linn. imp.

CONUS.

PLATE XXI.

Species 117. (Musée Royale, Paris.)

CONUS MELANCHOLICUS. *Con. testâ elongatâ, subcylindraceâ, striis subtilissimis cancellatâ; aurantio-rubrâ, maculis flavidis, irregularibus in medio fasciatâ; spirâ plano-acutâ, spiraliter striatâ, aurantio-rubro variegatâ.*

THE MELANCHOLY CONE. Shell elongated, rather cylindrical, cancellated with exceedingly fine striæ; orange-red, encircled round the middle, or rather below the middle, with a row of irregular yellowish spots; spire smooth and sharp, spirally striated, variegated with orange-red.

LAMARCK, Anim. sans vert., vol. vii. p. 513.

Hab. —— ?

I have attentively examined Lamarck's *Conus melancholicus* in the Musée Royale at Paris, and am quite of opinion that it is a very distinct and characteristic species; it is the only specimen known, and I feel therefore much indebted to M. Valenciennes for allowing me to obtain a drawing of it.

Species 118. (Fig. *a* and *b*, Mus. Cuming.)

CONUS MOZAMBICUS. *Con. testâ oblongo-turbinatâ, lævi, basim versus sulcatâ; fulvâ, fusco plus minusve longitudinaliter inquinatâ, fasciâ pallidè cæruleâ in medio cinctâ; spirâ rotundato-convexâ, fusco variegatâ, apice acuto.*

THE MOZAMBIQUE CONE. Shell oblong-turbinated, smooth, grooved towards the base; yellowish, more or less longitudinally bedaubed with brown, and encircled round the middle with a pale blue band; spire rotundately convex, variegated with brown, apex sharp.

Variety β. (Fig 118 *b*.)

Testa flavido-fusca, non fasciata, tæniis continuis, fusco alboque articulatis, in medio cincta.

Shell yellowish-brown, not banded, but encircled round the middle with fillets of articulated brown and white.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 696.

Hab. Mozambique (found in rocky places); Hennah.

This is a light rudely-formed shell, very irregularly smeared with colour. The variety β may be immediately recognised by the central articulated fillets, though few and scattered.

Species 119. (Mus. Stainforth.)

CONUS VIRGO. *Con. testâ turbinatâ, solidâ, basim versus transversè striatâ; pallidè luteâ, basi cæruleo-violascente; spirâ plano-convexâ, obtusâ.*

THE VIRGIN CONE. Shell turbinated, solid, transversely striated towards the base; pale yellow, base deep bluish-violet; spire flatly convex.

LINNÆUS, Syst. Nat. (Gmelin's edit.), p. 3376.

LAMARCK, Anim. sans vert., vol. vii. p. 468.

Hab. Ceylon, &c.

Few shells exhibit a more decided peculiarity of specific character than the *Conus virgo*. The deep blue-purple base forms a rich contrast with the pale yellow body-colour, and is a never-failing mark of distinction.

Species 120. (Fig. *a* and *b*, Mus. Stainforth.)

CONUS PRÆLATUS. *Con. testâ oblongo-turbinatâ, purpureo-castaneo nebulosâ, interstitiis maculis trigonis vel oblongo-cordatis, albis, cæsio variegatis, reticulatis; maculis grandibus, purpureo-castaneis, albo seriatim punctatis; spirâ obtuso-convexâ; aperturæ fauce cæsio-tinctâ.*

THE PRELATE CONE. Shell oblong-turbinated, clouded with large broad patches of purple chestnut, the interstices between which are reticulated with triangular or oblong-heart-shaped white spots variegated or tinted with bluish-grey; large purple chestnut patches more or less covered with rows of white dots; spire obtusely convex, interior faintly stained with bluish-grey.

Variety β. (Pl. XV. Fig. 76.)

Testa subventricosa, luteo-castaneo pallidè nebulosa, maculis albis incarnato variegatis.

Shell rather ventricose, clouded with patches of pale yellowish-chestnut, the white heart-shaped spots of the interstices being tinted or variegated with lilac or flesh-colour.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 746.

LAMARCK, Anim. sans vert., vol. vii. p. 520.

Hab. —— ?

As far as I am enabled to judge by figures and descriptions, this shell does not appear to have been known hitherto in fine condition. The splendid specimens now before me, from the collection of the Rev. Mr. Stainforth, approach in form though not in size to the *C. episcopus*: the most striking peculiarity of the species is in the delicate manner in which the white heart-shaped spots are tinged on one side with grey or flesh-colour.

Species 121. (Mus. Stainforth.)

CONUS CONSORS. *Con. testâ turbinatâ, lævi, basim versus sulcatâ; luteolâ, luteo-fuscescente transversim et longitudinaliter variè fasciatâ; spirâ subobesâ, convexo-elatâ, apicem versus subtilissimè coronatâ; apice acuto.*

THE CONSORT CONE. Shell turbinated, smooth, grooved towards the base; yellowish, variously banded transversely and longitudinally with pale yellowish-brown; spire rather stout, convexly raised, very finely coronated or beaded towards the apex; apex sharp.

SOWERBY, Conch. Illus., p. 42.

Hab. ——?

The spire of this shell is sometimes indistinctly tessellated with the same faint yellowish-brown which adorns the body of it.

122 a.

122 b

122 c

124

123 a

123 b

125

127

126

Sowerby fecit

CONUS.

PLATE XXII.

Species 122. (Fig. *a* and *c*, Mus. Cuming; Fig. *b*, Mus. Wigan.)

CONUS MONACHUS. *Con. testâ oblongo-turbinatâ, subcylindraceâ, lævigatâ, basi sulcatâ; pallidè cæruleâ, olivaceo-cæsio nebulosâ et undatâ; spirâ breviusculè conicâ, spiraliter striatâ, apice subobtuso.*

THE MONK CONE. Shell oblong-turbinated, somewhat cylindrical, smooth, grooved at the base; pale blue, waved and clouded with olive-grey; spire rather shortly conical, spirally striated, apex somewhat blunt.

LINNÆUS, Syst. Nat., vol. ii. p. 1168.

LAMARCK, Anim. sans vert., vol. vii. p. 478.

Hab. Asiatic seas; Lamarck.

The *Conus monachus* is very closly allied to the *Conus achatinus*; it may, however, be readily distinguished by not having any of the interrupted transverse lines which characterize that species.

Species 123. (Fig. *a*, Mus. Cuming; Fig. *b*, Mus. Stainforth.)

CONUS COLUBRINUS. *Con. testâ oblongo-turbinatâ, subventricosâ, supernè tumidiusculâ, solidâ, infernè coarctatâ, transversim subtilissimè striatâ; fuscâ vel aurantio-fuscâ, maculis albis, elongato-cordatis, irregularibus, sejunctis, profusè ornatâ; spirâ obtusoelatâ.*

THE SNAKE-SKIN CONE. Shell oblong-turbinated, rather ventricose; upper part a little swollen, solid, lower part contracted, very finely striated transversely; brown or orange-brown, profusely ornamented with irregular, isolated, elongately heart-shaped white spots; spire obtusely raised.

LAMARCK, Anim. sans vert., vol. vii. p. 517.

SOWERBY, Conch. Illus., f. 106.

Hab. Island of Taheite (found on the reefs); Cuming.

This is a very peculiarly spotted Cone; the spots are entirely separated from each other, and may be likened in appearance to the globules into which oil separates on the surface of water.

There is a bad figure of the *Conus colubrinus* in Martini's Conch. Cab., vol. ii. pl. 54. f. 594.

Species 124. (Mus. Stainforth.)

CONUS CERVUS. *Con. testâ majusculâ, cylindraceo-ovatâ, subinflatâ; pallidè rosaceo-fulvâ, tæniis inæqualibus fulvo alboque promiscuè articulatis cinctâ; spirâ brevi, spiraliter striatâ, apice pallidè rosaceo; aperturæ fauce albâ.*

THE STAG CONE. Shell rather large, cylindrically ovate, a little inflated; pale rosaceous yellow, encircled with unequal fillets of promiscuously articulated white and dull brownish-yellow; spire short, spirally striated, apex pale rose-colour; interior of the shell white.

LAMARCK, Anim. sans vert., vol. vii. p. 510.

Conus bullatus, var., Sowerby, Conch. Illus., f. 24.

Hab. ——?

It is related in my account of the *Conus Deshayesii* (vide Pl. V. Species 28.) how much I am indebted to M. Delessert of Paris, and to his curator M. Chenu, for an opportunity of examining the identical shell described by Lamarck under the title of *Conus cervus*; and I now repeat my estimation of their courtesy, because it has enabled me to correct the illustration of a species hitherto unknown to English writers. The *Conus cervus*, a magnificent specimen of which is now before me, belonging to the Rev. Mr. Stainforth, is nevertheless so closely allied to the *Conus bullatus*, that I am strongly inclined to think with Mr. Sowerby that it may prove to be a gigantic variety of that species. It differs most remarkably in size, and it is of much paler colour, but these differences cannot with propriety be looked upon as specific distinctions. The difficulty of uniting the *Coni cervus* and *bullatus* under one species, with a proper degree of certainty, arises from our having no intermediate examples.

Species 125. (Mus. Cuming.)

CONUS INTERRUPTUS. *Con. testâ oblongo-turbinatâ, supernè tumidiusculâ, basim versus sulcatâ; incarnatâ, spadiceo longitudinaliter nebulosâ, tæniis frequentibus spadiceo alboque articulatis cinctâ; spirâ concavo-elatâ, apice acuto; aperturæ fauce purpureâ.*

THE INTERRUPTED CONE. Shell oblong-turbinated, rather swollen at the upper part, grooved towards the base; pale rosaceous flesh-colour, clouded lon-

gitudinally with dark reddish-brown, and encircled with numerous fillets of the same colour articulated with white; spire concavely raised, apex sharp; interior purple.

Broderip and Sowerby, Zool. Journ., vol. iv. p. 379.
Gray, Zool. Beechey's Voy., p. 119. pl. 33. f. 2.
Hab. Pacific Ocean, near Mazatlan.

This shell, originally imported in the Blossom, is now common in collections.

Species 126. (Mus. Cuming.)

Conus mahogani. *Con. testâ elongato-turbinatâ, subcylindraceâ, basim versus sulcatâ; albidâ, spadiceo profusè tinctâ, tæniis frequentibus spadiceo alboque articulatis cinctâ; spirâ valdè elatâ; aperturæ fauce albâ.*

The mahogany Cone. Shell elongately turbinated, rather cylindrical, grooved towards the base; whitish, profusely stained with reddish-brown and encircled with numerous fillets of the same colour articulated with white; spire very much raised; interior white.

Reeve, Pro. Zool. Soc., 1843.
Hab. Salango, West Columbia (found in sandy mud); Cuming.

This species differs from the preceding in having the spire narrower and much more elevated; it is always more strongly and fully stained with the dark reddish-brown, and the interior of the shell exhibits no indication of any purple.

Species 127. (Mus. Cuming.)

Conus gladiator. *Con. testâ subinflato-turbinatâ, basim versus striatâ, brunneâ, albo obscurè longitudinaliter strigatâ, balteo subcentrali subobsoleto, albente, cinctâ; spirâ granuloso-striatâ, brunneâ, leviter coronatâ, tuberculis albis; aperturâ latiusculâ; epidermide crassâ, longitudinaliter rugosâ, hic et illic tomentosâ.*

The gladiator Cone. Shell rather inflately turbinated, striated towards the base; brown, obscurely longitudinally streaked with white and encircled with a rather obsolete nearly central white belt; spire granulously striated, brown, slightly coronated, tubercles white, aperture rather wide; epidermis thick, rough longitudinally, here and there hairy or tufted.

Broderip, Pro. Zool. Soc., 1833.
Sowerby, Conch. Illus., f. 34.
Hab. Panama (found in soft sand in the clefts of rocks); Cuming.

Mr. Broderip observes, "that the ground-colour of this shell is sometimes ash-colour with longitudinal chestnut stripes;" it approaches nearest to the *Conus brunneus*, though readily distinguishable on account of the spire being more finely coronated.

128 b

128 a

129

130

131

132

53 b

Sowerby, del et lith.

prel. lith. Linn. imp.

CONUS.

PLATE XXIII.

Species 128. (Fig. *a*, Mus. Dennison; Fig. *b*, Mus. Cuming.)

CONUS TULIPA. *Con. testâ oblongâ, ventricosâ, inflatâ, lævi, columellâ basim versus leviter sulcatâ; cæruleo-albâ, rubido- aut purpureo-fusco longitudinaliter undatâ, lineisque fuscis albipunctatis cingulatâ; spirâ brevi, obsoletè coronatâ, leviter canaliculatâ, spiraliter striatâ; apice roseo, elato, acuto; aperturâ patente, fauce purpureo-violaceâ.*

THE TULIP CONE. Shell oblong, ventricose, inflated, smooth, columella finely grooved towards the base; bluish-white, longitudinally waved with reddish or purplish-brown, and encircled with lines of white-spotted brown; spire short, obsoletely coronated, slightly canaliculated and spirally striated; apex rose-tinted, elevated and sharp; aperture open, interior purplish-violet.

LINNÆUS, Syst. Nat. (Gmelin's edit.), p. 3395.

LAMARCK, Anim. sans vert., vol. vii. p. 454.

Hab. Island of Annaa, Pacific Ocean (found on the reefs); Cuming.

The above locality is particularized for this shell on the authority of Mr. Cuming; it is well known to inhabit many other localities in the tropical regions.

Species 129. (Mus. Cuming.)

CONUS INTERMEDIUS. *Con. testâ elongato-turbinatâ, subcylindraceâ, lævi, columellâ basim versus subtiliter sulcatâ; puniceo-roseâ, maculis grandibus fuscescentibus reticulatis interruptè bibalteatâ, interstitiis plus minusve pallidè reticulatis; spirâ convexo-elatâ, spiraliter striatâ; aperturâ patente, fauce pallidè violaceâ.*

THE INTERMEDIATE CONE. Shell elongately turbinated, somewhat cylindrical, smooth, columella finely grooved towards the base; scarlet rose-colour, belted with two interrupted rows of large reticulated brownish blotches, the interstices being more or less faintly reticulated with the same colour; spire convexly raised, spirally striated; aperture open, interior pale violet.

REEVE, Pro. Zool. Soc., 1843.

Conus geographus, var., Broderip; Sowerby, Conch. Illus., f. 33.

Hab. Island of Annaa, Pacific Ocean (found on the reefs); Cuming.

I have long suspected this shell to be distinct from the *Conus geographus*; it differs constantly in form, in colour, and in the general distribution of the brown reticulated painting. These differences are unimportant however compared with a character which it has in common with the *Conus tulipa*, namely that of having the lower portion delicately grooved. The base of the *Conus geographus* does not present the slightest indication of this grooving, nor indeed any inequality of surface beyond the ordinary striæ of growth, which pass in the contrary direction. I notice this character in the *Conus intermedius* merely to show that it cannot be a variety of the *Conus geographus*; the grooving must not be regarded as a specific peculiarity, because, as already observed, it is common to the *Conus tulipa*, as well as to another closely allied species, the *Conus obscurus* (vide Pl. XVI. Sp. 82.).

Species 130. (Mus. Cuming.)

CONUS GEOGRAPHUS. *Con. testâ oblongo-turbinatâ, ventricosâ, tenui, inflatâ, cæruleo et incarnato pallidè tinctâ, rubido-fusco maculatâ et reticulatâ; spirâ concavâ, leviter canaliculatâ, spiraliter striatâ, coronatâ, tuberculis subcompressis, prominentibus; apice rosaceo.*

THE GEOGRAPHER CONE. Shell oblong-turbinated, ventricose, thin, inflated, faintly stained with flesh-colour and washy blue, blotched and reticulated with reddish-brown; spire concave, slightly canaliculated, spirally striated and coronated, the tubercles being a little compressed and rather prominent; apex rose-tinted.

LINNÆUS, Syst. Nat. (Gmelin's edit.), p. 3396.

LAMARCK, Anim. sans vert., vol. vii. p. 455.

Hab. Mauritius, Ceylon, &c. (found on the reefs).

This well-known shell differs from its allied species the *Coni tulipa, intermedius*, and *obscurus* in size, painting, and in the absence of fine grooves round the base.

Species 131. (Mus. Cuming.)

CONUS LINEATUS. *Con. testâ oblongo-turbinatâ, basim versus granuloso-liratâ; albâ, aurantio-fusco filisque transversis numerosis tinctâ, macularum albarum irregularium fasciis tribus relinquentibus; spirâ de-*

presso-convexâ, fusco alboque arcuatim tessellatâ; aperturæ fauce albâ.

The lineated Cone. Shell oblong-turbinated, encircled towards the base with fine granular ridges; white, stained with orange-brown and numerous transverse thread-like lines in such a manner as to leave three bands of very irregular white spots; spire depressly convex, arcuately tessellated with brown and white; interior of the aperture white.

Chemnitz, Conch. Cab., vol. x. pl. 138. f. 1285.
Lamarck, Anim. sans vert., vol. vii. p. 466.
Hab. Ceylon (found in rocky places); Dr. Siebald.

This species may be recognised by the fine thread-like lines which traverse the darker parts of the shell; it passes very nearly in other respects into the *C. vulpinus*, the painting is so variable. There is a small specimen of the *Conus lineatus* in the collection of the Rev. Mr. Stainforth with the rows of granules extending halfway up the shell, and they are much more strongly developed than in the specimen here figured.

It is a remarkable fact, that all granulated varieties of any species of Cone are of diminutive proportion, and the more diminutive the more highly granulated.

Species 132. (Mus. Cuming.)

Conus vitulinus. *Con. testâ oblongo-turbinatâ, basim versus granuloso-liratâ; albâ, fasciâ latâ aurantio-fuscâ cingulatâ, fusco suprà et infrà albam undatim intersecante; spirâ depresso-convexâ, leviter canaliculatâ, fusco alboque arcuatim tessellatâ; aperturæ fauce albâ; basi intus extusque nigerrimo-fuscâ.*

The calf-striped Cone. Shell oblong-turbinated, granulously ridged towards the base; white, encircled with a broad dark orange-brown band, with a number of waved streaks of the same colour proceeding from it, intersecting the white above and below; spire depressly convex, slightly canaliculated, arcuately tessellated with brown and white; interior of the aperture white; base of the shell very dark brown both within and without.

Hwass, Enc. Méth. vol. i. part 2. p. 648. pl. 326. f. 3.
Lamarck, Anim. sans vert., vol. vii. p. 467.
Hab. Ceylon.

This species may be distinguished from the preceding by the regularly waved brown streaks which intersect the white spaces, and by the absence of the fine thread-like transverse lines.

Species 53. (Mus. Cuming.)

Conus pulchellus (variety β). *Testa largior, tumidior, bifasciata, punctis indistinctis; spirâ pallidè purpureâ, non canaliculatâ.*

Shell larger, more swollen, doubly banded, rows of dots indistinct; spire pale purple, not canaliculated. *Conus cinctus*, Swainson.

For a detailed account of this beautiful shell, (*Conus pulchellus*, Variety β,) refer to Pl. XI. Sp. 53.

133 a

133 b

133 c

134

135

136

137

Sowerby del. et lith.

prel. lith. Linn. imp.

CONUS.

PLATE XXIV.

Species 133. (Fig. *a* and *b*, Mus. Stainforth; Fig. *c*, Mus. Cuming.)

CONUS PUNCTATUS. *Con. testâ turbinatâ, helvaceâ, zonâ albâ, angustâ, in medio fasciatâ, striis transversis numerosis, elevatis, fusco-punctatis, cinctâ; spirâ obtusâ, spiraliter striatâ, obsoletè coronatâ, fusco obliquè strigatâ; apice interdum subelato.*

THE DOTTED CONE. Shell turbinated, pale reddish brown, banded round the middle with a narrow white zone, and everywhere encircled with raised brown-dotted striæ; spire obtuse, spirally striated, obsoletely coronated, obliquely streaked with brown; apex sometimes a little elevated.

CHEMNITZ, Conch. Cab., vol. x. p. 36. pl. 139. f. 1294.
LAMARCK, Anim. sans vert., vol. vii. p. 455.

Variety β. (Fig. 133 *a* and 133 *c*.)

Testa lineis brevibus transversis, nigerrimo-fuscis, plus minusve nebulosis, longitudinaliter strigata.

Shell longitudinally streaked with short transverse blackish-brown lines, more or less clouded over.

Conus pellis-hyænæ, Chemnitz, Conch. Cab., vol. xi. p. 49. pl. 181. f. 1750 and 1751.

Conus hyæna, Hwass, Enc. Méth. vers, vol. i. part 2. p. 656. pl. 327. f. 5 and 7; Lamarck, Anim. sans vert., vol. vii. p. 472.

Hab. West Coast of Africa, Coast of Guinea; Dr. Siebald.

There can be no doubt of the complete specific affinity between the two shells described by Chemnitz, Bruguière, Lamarck and others, under the respective titles of *punctatus* and *hyæna*. The specimens here selected for representation, though extreme varieties, agree precisely in many important particulars: in the peculiar parallel of the aperture for example, the grooving round the base, the spiral striæ of the spire, the slight irregularity of the suture occasioned by the spire being obsoletely coronated, and the pale central band; whilst on the other hand in the features in which they differ, such as the greater or less depression of the spire, and the longitudinal streaks of colouring matter, they are completely assimilated by intermediate varieties.

Species 134. (Mus. Stainforth.)

CONUS AULICUS. *Con. testâ cylindraceo-elongatâ, fuscâ aut castaneo-fuscâ, transversè lineatâ, maculis grandibus triangularibus, inæqualibus, albis, vividè ornatâ; spirâ elevato-exsertâ.*

THE COURT CONE. Shell cylindrically elongated, brown or chestnut-brown, crossed with numerous lines, and vividly ornamented with large, unequal, white, triangular spots; spire elevately exserted.

LINNÆUS, Syst. Nat., vol. ii. p. 1171.
LAMARCK, Anim. sans vert., vol. vii. p. 515.
Hab. Ceylon, Mauritius, &c.

The large triangular white spots, so characteristic of the *Conus aulicus*, are somewhat larger and more distinct in the magnificent specimen here represented than usual. The most important specific feature of the shell is also unusually clear, namely, the absence of any articulated white spaces or punctures on the transverse lines.

Species 135. (Mus. Cuming.)

CONUS FUMIGATUS. *Con. testâ turbinatâ, lævi, luteo-castaneâ, lineis fuscis perpaucis, zonâque albidâ, vividâ, subcentrali, cingulatâ; zonâ fusco hic et illic longitudinaliter strigatâ; spirâ obtuso-convexâ, leviter canaliculatâ, albâ, fusco inquinatâ.*

THE SMOKED CONE. Shell turbinated, smooth, yellowish chestnut, encircled with a few brown lines, and a vivid white, nearly central zone, longitudinally streaked here and there with brown; spire obtusely convex, slightly canaliculated, white, bedaubed with brown.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 704.
LAMARCK, Anim. sans vert., vol. vii. p. 496.
Hab. Seas of America; Lamarck.

This shell does not appear to have been known hitherto in good condition, the fine transverse lines, and the scattered painting of the white zone never having been noticed.

Species 136. (Mus. Cuming.)

CONUS LIGNARIUS. *Con. testâ oblongo-turbinatâ, basim versus subtiliter sulcatâ; luteo-fuscâ, fusco indistinctè bifasciatâ, filis tenuissimis fuscis densissimè cingu-*

latâ; spirâ planiusculâ, leviter canaliculatâ, suturâ subirregulari, apice elato, acuto.

The wood Cone. Shell oblong-turbinated, finely grooved towards the base; yellowish-brown, encircled with two indistinct bands of pale brown, and a number of very fine dark brown thread-like lines; spire flattish, lightly canaliculated, suture somewhat irregular, apex elevated and sharp.

Reeve, Pro. Zool. Soc., 1843.

Hab. Port Sacloban, Island of Leyte, Philippines (found on mud banks just above low-water mark); Cuming.

This Cone, which looks exactly as if it were carved out of solid box-wood, was found by Mr. Cuming in great abundance in the above-mentioned locality.

Species 137. (Mus. Stainforth.)

Conus erythræensis. *Con. testâ turbinatâ, lævi, albidâ, maculis rubido-fuscis numerosis, irregulariter subquadratis, interdum bifasciatim confluentibus, seriatim cinctâ; spirâ exsertâ, leviter canaliculatâ, rubido-fusco densissimè tessellatâ; apice acuto, aperturæ fauce violaceâ.*

The red-spotted Cone. Shell turbinated, smooth, whitish, encircled with rows of numerous, irregularly square, reddish-brown spots, sometimes flowing together so as to form two cross bands; spire exserted, slightly canaliculated, thickly tessellated with reddish-brown; apex sharp, interior violet.

Beck, MSS., Mus. King of Denmark.

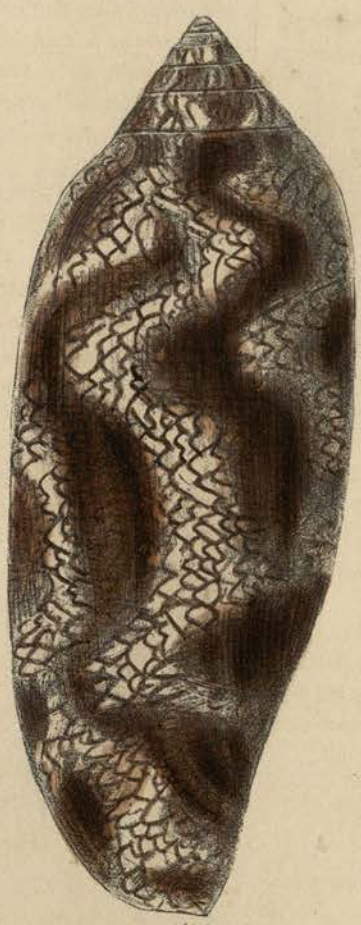
Hab. —— ?

The painting of this shell resembles somewhat that of certain dwarf varieties of the *Conus leoninus*.

139 a

138

139 b



141 a

140

141 b

142

LIBRARY OF THE ROYAL BOMBAY ASIATIC SOCIETY

Sowerby, del. et lith.

prel. lith. Linn. imp.

CONUS.

PLATE XXV.

Species 138. (Mus. Stainforth.)

CONUS PRÆFECTUS. *Con. testâ elongato-turbinatâ, angustâ, lævi, basim versus sulcatâ, sulcis peculiariter pertusis; fulvâ, albido pallidè fasciatâ; spirâ convexo-acutâ, spiraliter striatâ, fulvo variegatâ; apice elato, acuto.*

THE OVERSEER CONE. Shell elongately turbinated, narrow, smooth, grooved towards the base, grooves peculiarly prickled; brownish yellow, encircled with a nearly central faint whitish band; spire convexly raised, spirally striated, variegated with brownish yellow; apex raised and acute.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 754.

LAMARCK, Anim. sans vert., vol. vii. p. 513.

Conus teres lævis, Martini.

Conus ochroleucus, Gmelin.

Hab. Swan River; Lieut. Collie.

This species may be distinguished by its elongated form, its pale nankeen colour, and the peculiarly pricked grooves round the base.

Species 139. (Fig. *a* and *b*, Mus. Cuming.)

CONUS ANEMONE. *Con. testâ oblongo-turbinatâ, transversim striatâ, basim versus sulcatâ, albido-cinereâ, vel cinnamomeâ, vel roseâ, fusco aut castaneo peculiariter sparsâ; spirâ elatâ, spiraliter striatâ; apice roseo.*

THE ANEMONE CONE. Shell oblong-turbinated, transversely striated, grooved towards the base, pale ash, cinnamon, or rose-colour, peculiarly sprinkled with brown or chestnut; spire elevated, spirally striated; apex rose-tinted.

LAMARCK, Anim. sans vert., vol. vii. p. 479.

Variety β. (Fig. 139 *a*.)

Testa brevior, inflatior, albido-cærulea, fusco frequentiore; spira depressior.

Shell shorter, more inflated, pale blue, with the sprinkled brown more frequent; spire more depressed.

Conus maculosus, Sowerby, Conch. Illus., f. 3.

Hab. Van Diemen's Land, Port Lincoln, Port Essington, &c., Australia.

The *Conus anemone*, which has been received in great abundance from Australia, presents so wide a variation of growth, that it seems almost absurd to think that a proper specific relation can be established between the extreme forms here represented; the one short light and inflated, the other elongated and comparatively solid. Such however is the fact: the specimens, of which a numerous series is before me, exhibit the minutest gradation from one extreme to the other, accompanied with the consequent elevation or depression of the spire; the striated surface, the spirally-striated spire, the light grooving round the base, and the peculiar sprinkled character of the painting are, within significant modification, the same in all. Let no one judge of this seemingly anomalous relation without a critical examination and comparison of numerous specimens.

Species 140. (Mus. Cuming.)

CONUS GRADATUS. *Con. testâ elongato-turbinatâ, lævius-culâ, albidâ, rubido-fusco longitudinaliter inquinatâ; spirâ turrito-exsertâ; apice valdè elato.*

THE TURRETED CONE. Shell elongately turbinated, rather smooth, whitish, longitudinally bedaubed with reddish brown; spire exserted in the form of a turret; apex very elevated.

GRAY, MSS., British Museum.

Hab. Salango, South America (found on the sands); Cuming.

I have seen several specimens of this remarkable shell, each exhibiting the same peculiarly turreted spire, and the same exact style of painting. It approximates in its general outline to the *Conus generalis*, and is certainly very closely allied to it; I cannot however agree with my excellent friend the Rev. Mr. Stainforth, in considering it to be a monstrosity of that species.

Species 141. (Fig. *a*, Mus. Stainforth; Fig. *b*, Mus. Cuming.)

CONUS AURATUS. *Con. testâ cylindraceo-elongatâ, aurantio-castaneâ, transversim lineatâ, maculis albis cordatis, seriebus longitudinalibus, irregularibus, remotis, ornatâ; lineis transversis subobsoletè albipunctatis; spirâ valdè exsertâ, apice subobtuso.*

THE GILDED CONE. Shell cylindrically elongated, orange-chestnut, transversely lineated, and ornamented with distant, irregular, longitudinal rows of white heart-shaped spots; transverse lines some-

what obsoletely punctured or articulated with white; spire very elevated, apex rather obtuse.

Lamarck, Anim. sans vert., vol. vii. p. 516.

Conus aulicus, var., Bruguière.

Hab. Ceylon, Mauritius, &c.

Variety β. (Fig. 141 *b*.)

Testa elongatior, roseo-castanea, maculis triangularibus pallidè roseis.

Shell more elongated, rose-chestnut, with the triangular spots pale rose.

Conus aulicus, var., Sowerby.

Hab. Isle of Annaa or Chain Island, Pacific Ocean (found on the reefs); Cuming.

Although the *Conus auratus* may be commonly distinguished from the *Conus aulicus* by its orange or rose tint, and more cylindrically-elongated form, it has not been separated on those grounds by Lamarck. The difference which this acute conchologist detected, is that of the transverse lines in the species under consideration being more or less spotted or articulated with small white dots or punctures. "Ses lignes transverses," says Lamarck, "articulées de points blancs, quoique peu apparentes, mais dont on apperçoit toujours des vestiges, l'en distinguent constamment." This punctured articulation is not however peculiar to the *Conus auratus*; it occurs in the *Coni episcopus, magnificus,* and other reticulated species. They have nevertheless their specific peculiarities, and I see no reason why this simple distinction between the *Coni aulicus* and *auratus* should not be observed if only to facilitate the arrangement of the long and very difficult series of reticulated or brocaded Cones.

Spècies 142. (Mus. Cuming.)

Conus Orion. *Con. testâ turbinatâ, transversim striatâ; castaneâ, albo sparsim maculatâ, balteo albo, castaneo supernè tessellato, medianè cinctâ; spirâ mediocri, albo castaneoque maculatâ.*

The Orion Cone. Shell turbinated, transversely striated, chestnut-colour, sparingly spotted with white and encircled round the middle with a white band, tessellated on the upper part with chestnut; spire ordinary, spotted with white and chestnut.

Broderip, Pro. Zool. Soc., 1833.

Sowerby, Conch. Illus., f. 40.

Hab. Real Llejos, Central America (found in soft sand in the clefts of rocks); Cuming.

In some specimens of this shell, the remains, as it were, of a blotched moniliform band may be traced between the white central belt and the spire.

143 a

144

143 b

143 a

146

143 b

147 a

Sowerby, del. et lith.

148

147 b

prel. lith. Linn. imp.

CONUS.

PLATE XXVI.

Species 143. (Fig. *a*, Mus. Stainforth ; Fig. *b*, Mus. Cuming.)

CONUS MINIMUS. *Con. testâ obeso-turbinatâ, pallidè rosea aut cæruleâ, balteis duobus latis, viridi-glaucinis, tæniis angustis numerosis, fusco alboque articulatis, cinctâ ; spirâ obtuso-convexâ, coronatâ.*

THE VERY SMALL CONE. Shell stoutly turbinated, pale rose or bluish, encircled with two broad greenish grey belts, and a number of narrow fillets of articulated brown and white ; spire obtusely convex, coronated.

LINNÆUS, Syst. Nat. (Gmelin's edit.), p. 3382.

LAMARCK, Anim. sans vert., vol. vii. p. 450.

Hab. Ceylon, &c. Found also by Mr. Cuming on coral rocks at the Isle of Annaa in the Pacific Ocean.

Variety *β*. (Fig. 143 *b*.)

Testa major, valdius coronata, tuberculis grandibus, pallidis, tæniis latioribus.

Shell larger, more strongly coronated, tubercles large and pale, fillets wider.

Conus tiaratus, Broderip.

Hab. Gallapagos Islands (found in pools on the sands) ; Cuming.

There can be no doubt of Mr. Broderip's *Conus tiaratus* being a variety of the *Conus minimus* ; they exhibit too many characters in common to allow of their being separated.

Species 144. (Mus. Cuming.)

CONUS MONILIFER. *Con. testâ subfusiformi-turbinatâ, ad basim leviter recurvâ ; læviusculâ, albicante, castaneo variegatâ, punctis castaneis numerosis seriatim cinctâ ; spirâ valdè acuminatâ, castaneo maculatâ.*

THE NECKLACED CONE. Shell somewhat fusiformly turbinated, slightly recurved towards the base ; rather smooth, whitish, variegated with chestnut, and encircled with numerous rows of chestnut dots ; spire considerably acuminated, blotched with chestnut.

BRODERIP, Pro. Zool. Soc., 1833.

SOWERBY, Conch. Illus., f. 37.

Hab. Salango, South America (dredged from sandy mud at the depth of nine fathoms) ; Cuming.

The form of this shell is certainly peculiar ; the specimen here represented is the only one that has been seen at present.

Species 145. (Fig. *a* & *b*, Mus. Cuming.)

CONUS GLANS. *Con. testâ elongato-cylindraceâ, transversim striatâ, striis nunc planis, nunc granulosis, granulis compressis ; fulvo-fuscâ aut violaceâ, obsoletè albifasciatâ ; spirâ convexo-exsertâ, apice subobtuso.*

THE ACORN CONE. Shell elongately cylindrical, transversely striated, striæ sometimes smooth, sometimes granulated, granules compressed ; violet or yellowish brown, obsoletely banded with white ; spire convexly exserted, apex somewhat obtuse.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 735.

Hab. Philippine Islands, &c.

This species, of which I have represented two extreme varieties, is commonly variegated with both the violet and yellowish brown, and it is either smooth or more or less partially granulated, the granules being compressed.

Species 146. (Mus. Stainforth.)

CONUS REGULARIS. *Con. testâ suboblongo-turbinatâ, prope basim paululùm attenuatâ, lævi ; albidâ, rubido-fusco plus minusve pallidè tinctâ, fasciis fuscis angustis, numerosis, interruptis, cinctâ ; spirâ acuminato-exsertâ, fusco profusè maculatâ.*

THE REGULAR CONE. Shell rather oblong-turbinated, a little attenuated near the base, smooth ; whitish, more or less palely stained with reddish brown, and encircled with a number of narrow interrupted bands of a darker shade of the same colour ; spire acuminately exserted, profusely spotted with brown.

SOWERBY, Conch. Illus., f. 45.

Hab. Gulf of Nicoya, Central America (dredged from soft mud at the depth of twenty-three fathoms) ; found also in the Bay of Panama at the depth of about seven fathoms ; Hinds.

The specimen here represented is one of several very richly coloured examples collected by Mr. Hinds and Captain Belcher at the above-mentioned localities during the late expedition of H.M.S. *Sulphur*.

Species 147. (Mus. Cuming.)

CONUS FABULA. *Con. testâ subobeso-turbinatâ, supernè solidâ, transversè striatâ, striis subtilissimè granulosis, granulis æquidistantibus, regularibus; albâ, fusco, hic et illic longitudinaliter confluente, bifasciatim inquinatâ; spirâ obtuso-rotundatâ; apice parvo, elato, acuto.*

THE LITTLE BEAN CONE. Shell rather stoutly turbinated, superiorly solid, transversely striated, striæ very finely granulated, granules equidistant and regular; white, bedaubed with two broad bands of brown, flowing down here and there in streaks; spire obtusely rounded; apex small, elevated and sharp.

SOWERBY, Conch. Illus., f. 5.

Hab. Philippine Islands; Cuming.

There are certain varieties of this Cone which pass very nearly into others of the *Conus glans*; it may however be said to differ from that species in shape, in the form and character of the granules, and in its peculiar style of painting.

Species 148. (Mus. Stainforth.)

CONUS QUERCINUS. *Con. testâ obeso-turbinatâ, lævi, pallidè lutea, filis fuscis tenuissimis profusè cinctâ; spirâ plano-convexâ; apice elato, acuto.*

THE OAK CONE. Shell stoutly turbinated, smooth, pale yellow, encircled with a profusion of fine brown thread-like lines; spire flatly convex; apex raised, and sharp.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 681.

Hab. Ceylon, &c.

Few species vary more in general obesity of form than the *Conus quercinus*; I have not thought it necessary to figure any specimen of very stout growth, as the characters are more impaired in such varieties, and the species is among the most distinct and best known of the genus.

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CONUS.

PLATE XXVII.

Species 149. (Mus. Cuming.)

CONUS ALGOENSIS. *Con. testâ subcylindraceo-turbinatâ, tenuiculâ, lævi; castaneo-fuscâ, fasciâ unicâ, fasciisve duabus albis, peculiariter interruptis, ornatâ; spirâ brevi, convexâ, fusco alboque articulatâ.*

THE ALGOA CONE. Shell somewhat cylindrically turbinated, rather thin, smooth; light chestnut-brown, ornamented with one or two peculiarly interrupted white bands; spire short, convex, articulated with white and brown.

SOWERBY, Pro. Zool. Soc., 1834; Conch. Illus., f. 66.

Hab. Algoa Bay, southern coast of Africa (found on the sands); Capt. Percival.

This species may be recognised by the peculiar manner in which the brown painting is festooned, as it were, round the base of the spire.

Species 150. (Mus. Cuming.)

CONUS NANUS. *Con. testâ subobeso-turbinatâ, solidâ, albâ, pallidissimè livido-zonatâ, basi livido-purpurascente, epidermide luteo-olivaceâ indutâ; spirâ convexâ, coarctatâ, subtiliter coronatâ; aperturæ fauce basim versus livido-purpurascente.*

THE DWARF CONE. Shell rather stoutly turbinated, solid, white, very faintly lividly zoned, livid purple at the base, covered with a yellowish olive epidermis; spire convex, contracted, finely coronated; aperture livid purple towards the base.

BRODERIP, Pro. Zool. Soc., 1833.

Hab. Lord Hood's Island, Pacific Ocean (found on the reefs); Cuming.

The specimen selected for illustration is represented partially covered with epidermis.

Species 151. (Mus. Stainforth.)

CONUS ALBIMACULATUS. *Con. testâ turbinatâ, granulatâ, granulis prominentibus, subdistantibus; aurantiâ, macularum albarum grandium seriebus duabus vividè ornatâ; spirâ convexâ, obsoletè coronatâ, apice mucronato, elato.*

THE WHITE-SPOTTED CONE. Shell turbinated, granulated, granules prominent and rather distant; bright orange, vividly ornamented with two rows of large white spots; spire convex, obsoletely coronated, apex raised and pointed.

SOWERBY, Conch. Illus., f. 2.

Hab. —— ?

The white spots which characterize this species are so large, that five, at a moderate distance from each other, extend entirely round the shell.

Species 152. (Mus. Delessert.)

CONUS LORENZIANUS. *Con. testâ subpyramidali-turbinatâ, basim versus striatâ, lineisque punctatis notatâ; albidâ aut pallidè flavâ, flammis rufescentibus longitudinaliter pictâ; spirâ acuminato-exsertâ.*

THE LORENZIAN CONE. Shell somewhat pyramidally turbinated, striated, and marked with faintly dotted lines towards the base, whitish or pale yellow, longitudinally painted with reddish flames; spire acuminately exserted.

CHEMNITZ, Conch. Cab., vol. ii. p. 51. pl. 181. f. 1754 and 1755.

Conus flammeus, Lamarck.

Hab. Seas of Africa; Lamarck.

Chemnitz appears to have named this shell after a collection (or the owner of it) which furnished him with much valuable matter for illustration.

Species 153. (Mus. Cuming.)

CONUS CONCINNUS. *Con. testâ cylindraceo-pyriformi, politâ, basim versus sulcatâ, albâ, luteo-castaneo quasi geographicè pictâ; spirâ rotundatâ, suturis subtilissimè crenulatis, apice mucronato, elato, rosaceo.*

THE COMELY CONE. Shell cylindrically pear-shaped, polished, grooved towards the base, white, geographically painted, as it were, with yellowish chestnut; spire rounded, sutures very finely crenulated, apex raised, pointed, rose-tinted.

BRODERIP, Pro. Zool. Soc., 1833.

Hab. Bay of California (found on the sands); Mr. Babb, R.N.

An exceedingly pretty species, especially remarkable on account of the sutures of the spire being very minutely crenulated.

Species 154. (Mus. Stainforth.)

CONUS PUSILLUS. *Con. testâ subobeso-turbinatâ, solidâ, albâ, punctis quadrangulis rubidis, interdum longitudinaliter confluentibus, seriatim cinctâ; spirâ convexâ, subtiliter coronatâ; basi violaceo-nigricante.*

THE SMALL CONE. Shell rather stoutly turbinated, solid, white, encircled with rows of reddish quadrangular dots, sometimes flowing together longitudinally; spire convex, finely coronated; base very dark violet.

CHEMNITZ (not of Lamarck), Conch. Cab., vol. ii. p. 65. pl. 183. f. 1788 and 1789.

Hab. Seychelle Islands, north of Madagascar; M. Cloué.

I think it seems tolerably evident that Lamarck's *Conus pusillus* is not the shell described by Chemnitz under that title; and I feel much indebted to M. Cloué, an intelligent officer of the French navy, for the specimen here represented agreeing with the original.

Species 155. (Mus. Delessert.)

CONUS NARCISSUS. *Con. testâ turbinatâ, basim versus sulcatâ; aurantiâ, maculis perpaucis albis aspersâ, fasciâque albâ interruptâ deorsum ornatâ; spirâ subelatâ, obtusâ, striatâ, variegatâ.*

THE NARCISSUS CONE. Shell turbinated, grooved towards the base; orange, sprinkled with a few white spots, and ornamented towards the lower part with an interrupted white band; spire somewhat raised, obtuse, striated, variegated.

LAMARCK, Anim. sans vert., vol. vii. p. 492.

Hab. American Ocean; Lamarck.

The figure given in illustration of this species has been drawn expressly, by permission of M. Delessert, from the shell originally in Lamarck's possession; it has not hitherto been figured, and I feel much indebted to M. Chenu for his courtesy in allowing me to examine and make use of it.

Species 156. (Mus. Deshayes.)

CONUS ORBITATUS. *Con. testâ oblongo-turbinatâ, tenuiculâ, transversim liratâ, liris planis, interstitiis striato-pertusis; albidâ, ustulato-fusco variegatâ; spirâ acuminatâ, apice elato, acuto.*

THE RUT-MARKED CONE. Shell oblong-turbinated, rather thin, transversely ridged, ridges flat, interstices between them pricked and striated; whitish, variegated with burnt-brown; spire acuminated, apex raised and sharp.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

I kindly thank M. Deshayes for the use of this interesting little shell, which at first sight I thought to be a young specimen of the *Conus sulcatus*.

Species 157. (Mus. Stainforth.)

CONUS ELONGATUS. *Con. testâ elongato-turbinatâ, lævi, luteo-olivaceâ, supernè cæruleo-albâ, fasciâ interruptâ subindistinctâ deorsum cingulatâ; spirâ convexâ, cæruleo-albâ, subtilissimè coronatâ, apice rosaceo; basi et aperturæ fauce vividè violaceis.*

THE ELONGATED CONE. Shell elongately turbinated, smooth, yellowish olive, bluish white round the upper part, encircled round the lower with an indistinct interrupted band of the same colour; spire convex, bluish white, very finely coronated, apex rose-tinted; base and interior of the aperture deep violet.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

I adopt the Rev. Mr. Stainforth's manuscript name for this elegant little shell, believing that it may with great propriety be regarded as a new species.

Species 158. (Mus. Cuming.)

CONUS CINGULATUS. *Con. testâ turbinatâ, transversim striatâ, albidâ, flammis rubido-castaneis latiusculis undatis longitudinalibus, cingulisque numerosis articulatis transversis vividè pictâ; spirâ acuminatâ, variegatâ.*

THE GIRDLED CONE. Shell turbinated, transversely striated, white, vividly painted with rather broad, waved, reddish chestnut longitudinal flames, and a number of dark articulated narrow girdles of the same colour; spire acuminated and variegated.

LAMARCK, Anim. sans vert., vol. vii. p. 482.

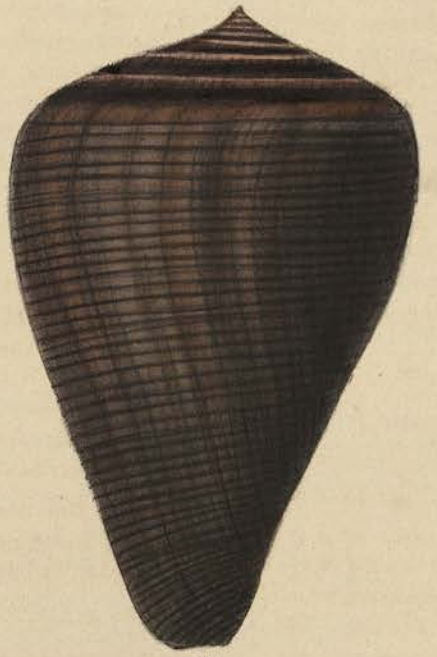
Hab. Indian Ocean; Lamarck.

The narrow girdles above noted are for the most part only visible on the longitudinal flames.

159

21b

21c



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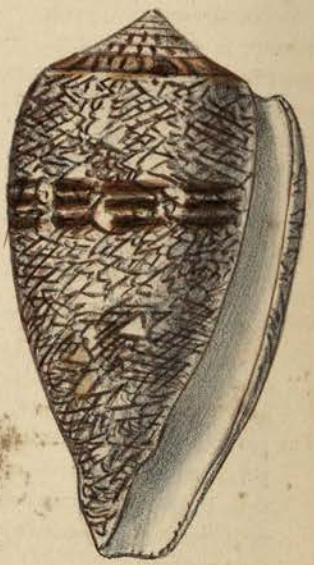


162

163

Sowerby del. et lith.

prel. lith. Linn. imp.

CONUS.

PLATE XXVIII.

Species 159. (Mus. Cuming.)

CONUS IODOSTOMA. *Con. testâ subelongato-turbinatâ, tenui, leviter inflatâ; albidâ, purpureo pallidissimè tinctâ, luteo-fuscescente sparsim et irregulariter punctatâ et maculatâ; spirâ subtilissimè sulcatâ, apice elato, acuto; aperturâ latiusculâ, fauce violaceo-purpureâ.*

THE VIOLET-MOUTH CONE. Shell somewhat elongately turbinated, thin, slightly inflated; whitish, very palely tinged with purple, sparingly and irregularly dotted and blotched with yellowish brown; spire very finely grooved, apex raised and sharp; aperture rather wide, interior stained with violet-purple.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

This shell has been supposed to have some considerable affinity with the *Conus Janus*; it does not however, in my opinion, exhibit any characters in common with that species, and may at once be distinguished by its tenuity, by its spotted peculiarity of painting, and by its violet-stained mouth.

Species 21. (Fig. *b* & *c*, Mus. Cuming.)

(Second notice.)

CONUS CENTURIO. (For description vide Plate IV.)

As this interesting species has not hitherto been represented in fine condition, I gladly avail myself of the opportunity of figuring a magnificent specimen, which has lately come into the possession of Mr. Cuming. The lip is peculiarly curved, and it presents a marked emargination at its junction with the base of the spire.

Hab. Island of Margarita, West Indies.

Species 160. (Mus. Stainforth.)

CONUS FIGULINUS. *Con. testâ solidâ, obesâ, supernè rotundatâ; cinereo-fuscâ, filis fuscis numerosis circumligatâ; spirâ planiusculo-convexâ, apice mucronato; aperturâ subamplâ, fauce pallidè cæruleo-albâ.*

THE CLAY CONE. Shell solid, stout, rounded at the upper part; ashy brown, encircled with a number of dark thread-like lines; spire rather flatly convex, apex pointed; aperture rather large, interior pale bluish white.

LINNÆUS, Syst. Nat. (Gmelin's edit.), p. 3384.

LAMARCK, Anim. sans vert., vol. vii. p. 484.

Hab. Ceylon, &c.

There is a pale ash-coloured variety of this well-known species which should perhaps be noticed.

Species 161. (Mus. Cuming.)

CONUS NEMOCANUS. *Con. testâ turbinatâ, lutescente, in medio albifasciatâ, zonis filisque tenuissimis undulatis approximatis fulvis cinctâ, et strigis fulvis arcuatis interdum longitudinaliter pictâ; spirâ convexo-depressâ, subobtusâ, fulvo tessellatâ; aperturæ fauce cæruleo-purpureâ.*

THE NEMOKA CONE. Shell turbinated, yellowish, encircled with a white band in the middle, together with a number of yellowish green zones, and very fine undulated thread-like lines, sometimes painted also longitudinally with dark broad curved streaks of the same colour; spire convexly depressed, rather obtuse, tessellated with yellowish green; interior of the aperture stained with bluish purple.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 712.

LAMARCK, Anim. sans vert., vol. vii. p. 500.

Hab. Island of Nemoka, Pacific Ocean; Hwass. Mauritius; Capt. Smith.

The longitudinal streaks which are so prominent in the specimen here figured are very inconstant, and the larger the shell is, the more indistinct they generally appear.

Species 162. (Mus. Wigan.)

CONUS ABBAS. *Con. testâ cylindraceo-turbinatâ, subinflatâ, aurantio-fusco subtilissimè reticulatâ, zonis duabus interruptis subindistinctè cinctâ; spirâ concavo-elatâ, apice mucronato; aperturâ latiusculâ, fauce albâ.*

THE ABBOT CONE. Shell cylindrically turbinated, rather inflated, very finely reticulated with orange-brown, and indistinctly encircled with two interrupted zones; spire concavely raised, apex pointed; aperture rather wide, interior white.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 750.

LAMARCK, Anim. sans vert., vol. vii. p. 523.

Hab. Ceylon, &c.

This species may be easily recognised from the rest of the brocade series of Cones by the fine character of the net-work; it is generally of a short cylindrical form, and much more inflated than its allied species. The specimen here figured is rather a large one, considerably above the average size.

[For a smaller and more characteristic example of this species see Conus Pl. XXXII.]

Species 163. (Mus. Cuming.)

CONUS TESSELLATUS. *Con. testâ turbinatâ, albâ, maculis coccineis quadrangulis, in zonis duabus confertioribus, seriatim cinctâ; basi sulcatâ, violaceâ; spirâ depresso-planâ, apice mucronato.*

THE TESSELLATED CONE. Shell turbinated, white, encircled with rows of quadrangular scarlet spots, crowded together more particularly into two zones; base grooved, stained with violet; spire depressly flat, apex pointed.

BORN, Ind. Mus. Cæsar., p. 131.

LAMARCK, Anim. sans vert., vol. vii. p. 464.

Hab. Ceylon, Mauritius, &c.

Although the spots which adorn this well-known species are commonly characterized as being of a quadrangular form, they are sometimes so much extended transversely as almost to exhibit the appearance of a series of broad interrupted lines.

I have a beautiful example before me of this variety, from the collection of J. Dennison, Esq.

164

165 a

165 b

166

167 a

167 c

167 b

Sowerby, del. et lith.

prel. lith. Linn. inc

CONUS.

PLATE XXIX.

Species 164. (Mus. Cuming.)

CONUS INSCRIPTUS. *Con. testâ turbinatâ, solidiusculâ, lævi, basim versus sulcatâ, sulcis latis, striatis; cæruleo-albidâ, maculis grandibus fuscescentibus, literis Sinensibus simillimis, trifasciatim inscriptâ, interstitiis macularum minorum serie unicâ cingulatis; spirâ mediocri, spiraliter striatâ, fuscescente variegatâ, apice acuto; aperturæ fauce violaceo-carneolatâ.*

THE INSCRIBED CONE. Shell turbinated, rather solid, smooth, grooved towards the base, grooves broad, striated; bluish white, inscribed with three bands of large pale brown spots, very like Chinese characters, interstices between the bands encircled with a single row of smaller spots; spire middling, spirally striated, variegated with pale brown, apex sharp; interior of the aperture violet flesh-colour.

REEVE, Pro. Zool. Soc., 1843.

Conus leo scandens? Chemnitz, Conch. Cab., vol. x. pl. 140. f. 1300.

Hab. ——?

This appears to me to be a well-characterized species, and clearly distinct from that variety of the *Conus Proteus* to which it so closely approximates in the style of painting. I much question whether the figure described by Chemnitz under the title of "*Leo scandens*," from an imagined resemblance of the hieroglyphical spots to the common heraldic device of the climbing lion, is not a representation of this shell, and that Lamarck, Pfeiffer, and others have somewhat erred in quoting it as the well-known similarly marked variety of *C. Proteus*.

There is another specimen of the *Conus inscriptus* in Mr. Stainforth's collection.

Species 165. (Mus. Cuming.)

CONUS CANONICUS. *Con. testâ cylindraceo-turbinatâ, solidiusculâ; albâ, nigricante-fusco reticulatâ, reticulo irregulari, identidem conferto, cæruleo tinctâ; spirâ acuminatâ, apice acutissimo; aperturæ fauce carneolato-roseo pallidè tinctâ.*

THE CANONICAL CONE. Shell cylindrically turbinated, rather solid; white, reticulated with blackish brown, net-work irregular, here and there close, and stained with blue; spire acuminated, apex very sharp; interior of the aperture stained with pale fleshy rose.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 749.

LAMARCK, Anim. sans vert., vol. vii. p. 522.

Hab. Seas of India.

This shell is of a solid narrow cylindrical growth, in which the brocade pattern is but very slightly interrupted by the patches of longitudinal lines which form so characteristic a feature in the *Conus textile*.

Species 166. (Mus. Cuming.)

CONUS SIAMENSIS. *Con. testâ oblongo-turbinatâ, supernè obesâ; albidâ, ferrugineo-fulvo fasciatâ, tæniis angustis numerosis, fusco et albo articulatis cingulatâ; spirâ subexsertâ, ferrugineo-fusco variegatâ, apic mucronato, acuto.*

THE SIAM CONE. Shell oblong-turbinated, stout round the upper part; white, banded with rusty yellowish brown, and encircled with a number of narrow fillets of articulated brown and white; spire somewhat exserted, variegated with rusty brown, apex pointed and sharp.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 662.

LAMARCK, Anim. sans vert., vol. vii. p. 477.

Hab. Asiatic Seas.

The *Conus Siamensis* may be chiefly distinguished from its next allied species, the *Coni papilionaceus* and *Prometheus*, by the number of narrow articulated fillets which encircle its entire surface.

Species 167. (Fig. *a* and *b*, Mus. Dennison; Fig. *c*, Mus. Burt.)

CONUS CHARACTERISTICUS. *Con. testâ obeso-turbinatâ, solidâ, albâ, flammis longitudinalibus rubido-fuscis, flexuosis, subvenosis aut ramosis, trifasciatim cinctâ; spirâ plano-depressâ, sulcis exilibus duobus spiraliter incisâ, apice obtuso.*

THE CHARACTERISTIC CONE. Shell stoutly turbinated, solid, white, encircled with three bands of flexuous, somewhat veined or branched longitudinal flames; spire flatly depressed, spirally engraved with two fine grooves, apex obtuse.

Chemnitz, Conch. Cab., vol. xi. p. 54. pl. 182. f. 1760 and 1761.

Conus quæstor, Lamarck.

Fig. 167 *c*.

Testa junior, flammis latioribus, longitudinaliter confluentibus.

Shell younger, with the flames wider, longitudinally flowing together.

Conus muscosus, Lamarck.

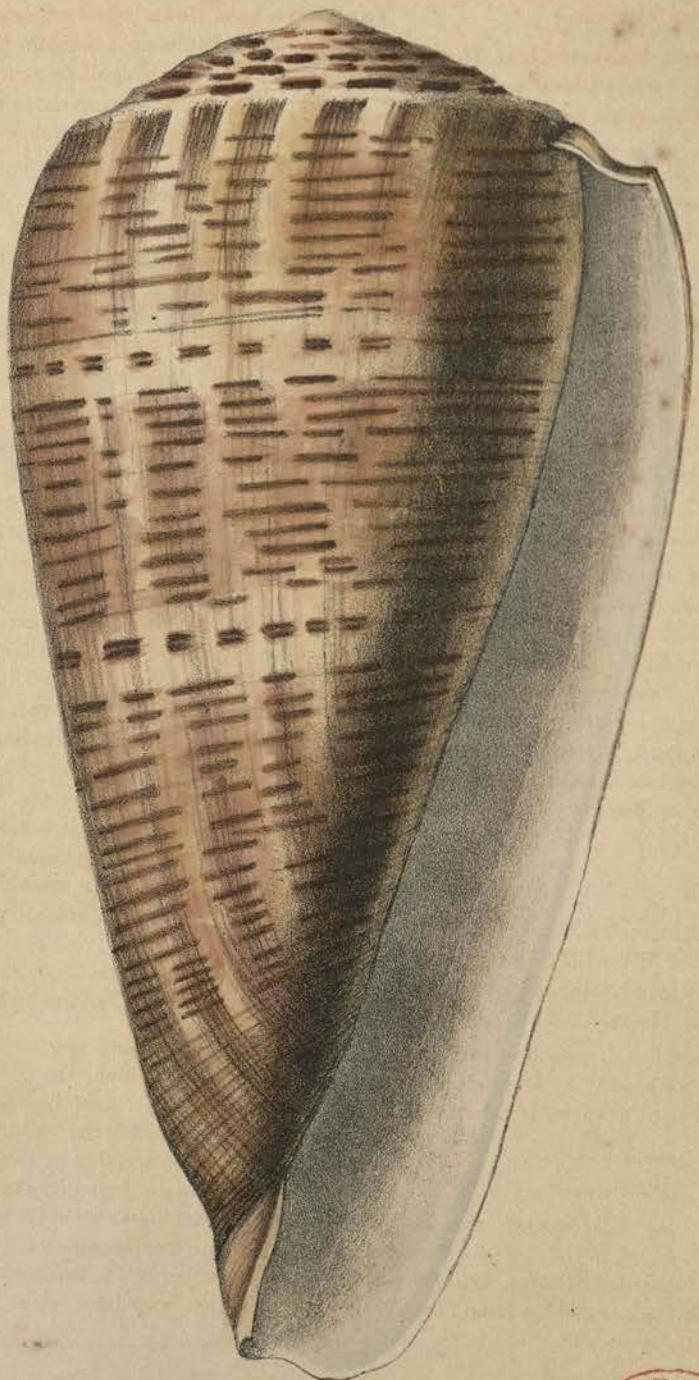
Hab. West Indies.

Chemnitz's figure and concise description of this species appear to have escaped the notice of Lamarck. The great author of the 'Animaux sans vertèbres' committed himself also by describing two different stages of growth as separate species.

168.

169 a.

169 b.



172.

170

171 a.

171 b.

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

Sowerby, del.

Reeve, imp.

CONUS.

PLATE XXX.

Species 168. (Mus. Metcalfe.)

CONUS FLAVESCENS. *Con. testâ turbinatâ, lævi, basim versus sulcatâ; flavescente, maculis albis irregularibus perpaucis biseriatim ornatâ; spirâ acutâ, angulatâ, apice mucronato, elato.*

THE PALE YELLOW CONE. Shell turbinated, smooth, grooved towards the base; pale yellow, ornamented with a very few irregular white spots ranged in two rows; spire sharp, angulated, apex pointed and raised.

GRAY —— ?, Sowerby, Conch. Illus., f. 68.

Hab. —— ?

The spots which encircle this shell around the middle, and around the base of the spire, are exceedingly irregular, having the appearance of spaces casually left in the deposit of the pale yellow colour.

Species 169. (Fig. *a* and *b*, Mus. Hankey.)

CONUS BULBUS. *Con. testâ subobeso-turbinatâ, solidâ, supernè rotundatâ; albâ, fusco longitudinaliter strigatâ, strigis irregularibus, obliquè undulatis, supernè et infernè diffusis; spirâ brevi, apice mucronato.*

THE BULB-ROOT CONE. Shell rather stoutly turbinated, solid, rounded at the upper part; white, longitudinally streaked with brown, streaks irregular, obliquely waved, spreading into each other at top and bottom; spire short, apex pointed.

Variety β.

Testa omninò fusca.

Shell entirely brown.

REEVE, Pro. Zool. Soc., 1843.

Hab. Cabenda, west coast of Africa (found at the depth of five fathoms in soft mud, washed down by the waters of the Congo); Hankey.

Four specimens of this very interesting species were collected at the above-named locality by Lieut. Hankey. It is a very solid shell, having the appearance of a small bulb-root.

Species 170. (Mus. Cuming.)

CONUS APLUSTRE. *Con. testâ subobeso-turbinatâ, tenui, subinflatâ, lævi, basim versus liratâ; rubido-fusco et cæruleo pallidè et subirregulariter zonatâ, tæniis fusco-articulatis angustis numerosis subtilibus ornatâ; spirâ depresso-convexâ, apice mucronato.*

THE LITTLE FLAG CONE. Shell rather stoutly turbinated, thin, somewhat inflated, smooth, ridged towards the base; somewhat irregularly zoned with pale blue and reddish brown, ornamented with a number of fine narrow fillets articulated with brown; spire depressly convex, apex pointed.

REEVE, Pro. Zool. Soc., 1843.

Hab. —— ?

This is another new species, and will be recognised as being very distinct from any hitherto described.

Species 171. (Fig. *a* and *b*, Mus. Delessert.)

CONUS CANCELLATUS. *Con. testâ fusiformi-turbinatâ, plus minusve obeso-inflatâ, basim versus attenuatâ; transversim sulcatâ, sulcis striis profundis longitudinalibus decussatim cancellatâ; albâ, maculis subquadrangularibus fuscescentibus trifasciatim cinctâ, fasciâ infimâ subobsoletâ; spirâ exsertâ, acuminatâ, spiraliter striatâ, marginibus apicem versus subtilissimè nodulosis; labro eximiè crenulato.*

THE CANCELLATED CONE. Shell fusiformly turbinated, more or less stoutly inflated, attenuated towards the base; transversely grooved, grooves decussately cancellated with deep longitudinal striæ; white, encircled with three indistinct bands of nearly quadrangular spots of pale brown, the lowest of which is nearly obsolete; spire exserted, acuminated, spirally striated, edges minutely noduled towards the apex; lip delicately crenulated.

LAMARCK, Anim. sans vert., vol. vii. p. 500; Enc. Méth., pl. 3. f. 1.

Conus pagodus, Chenu.

Hab. Island of Taheite, Pacific Ocean; Lamarck.

This highly interesting species was only known to Lamarck in bad condition, the specimen described by him, which I have fortunately had an opportunity of examining, being much worn and quite destitute of colour. It varies considerably in obesity of form, and the narrower varieties are generally the fainter coloured.

The *Conus cancellatus* is not uncommon in English collections; but the magnificent example here figured, from the collection of M. Delessert of Paris, is superior to any that I am acquainted with.

Species 172. (Mus. Stainforth.)

Conus Prometheus. *Con. testâ oblongo-turbinatâ, albidâ, maculis lineisque ferrugineo-aurantiis zonatâ; spirâ convexâ, subcanaliculatâ, ferrugineo-aurantio tessellatâ et variegatâ; apice mucronato.*

The Promethean Cone. Shell oblong-turbinated, whitish, zoned with rusty orange spots and lines; spire convex, slightly canaliculated, tessellated and variegated with rusty orange; apex pointed.

Hwass, Enc. Méth. vers, vol. i. part 2. p. 667.

Hab. Sechelle Islands, north of Madagascar (found on coral reefs); Capt. Caldwell.

The *Conus Prometheus* is the largest species of the genus, and the specimen here represented from the collection of the Rev. F. J. Stainforth the most gigantic example I remember to have seen.

173

174 a

174 b

174 c

175

176 a

176 b

Sowerby, del. et lith.

prel. lith. Linn. img.

CONUS.

PLATE XXXI.

Species 173. (Mus. Stainforth.)

CONUS ACUMINATUS. *Con. testâ turbinatâ, solidiusculâ, albâ, rubro- aut nigricante-fusco reticulatâ, reticulo plerumque bifasciatim confuso; spirâ leviter canaliculatâ, fusco tessellatâ et variegatâ, plus minusve acuminatâ, apice mucronato.*

THE ACUMINATED CONE. Shell turbinated, rather solid, white, reticulated with red or blackish brown, network generally confused or mingled so as to exhibit two indistinct bands; spire slightly canaliculated, tessellated and variegated with brown, more or less acuminated, apex pointed; interior of the aperture stained with flesh-colour.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 688.

LAMARCK, Anim. sans vert., vol. vii. p. 488.

Hab. Red Sea (found in clefts of rocks); Rüppell.

Bruguière particularizes three varieties of this well-known species, commonly distinguished as the "Vice-Admiral:" the first is characterized as having a white band, the second as being without any band, and the third as having two brown bands; and Lamarck describes the shell as having a white band either with or without a dotted line running through it. The distribution of the painted net-work is however so variable, that it is sufficient for me to notice that the shell exhibits these differences. The specimen here figured represents a line-dotted band as well as a strongly acuminated spire.

Species 174. (Fig. *a* and *b*, Mus: Cuming; Fig. *c*, Mus. Stainforth.)

CONUS DISTANS. *Con. testâ subelongato-turbinatâ, in medio leviter attenuatâ; rubido-flavescente, cinereo interdum pallidè zonatâ, lineis impressis, distantibus, subobsoletis, cingulatâ; basi nigricante-violaceo tinctâ; spirâ convexo-exsertâ, tuberibus albidis obtusis, interstitiis fuscis, coronatâ, apice peculiariter depresso-truncato.*

THE DISTANTLY-LINEATED CONE. Shell somewhat elongately turbinated, slightly attenuated in the middle; reddish yellow, sometimes zoned with pale ash-colour, encircled with distant, somewhat obsolete impressed lines; base stained with blackish violet; spire convexly exserted, coronated with obtuse white knobs, the interstices between which are reddish or yellowish brown; apex very peculiarly flatly truncated.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 634.

LAMARCK, Anim. sans vert., vol. vii. p. 459.

Conus Mennonitarum coronatus, Chemnitz.

Hab. New Zealand; Bruguière. Island of Taheite, Pacific Ocean (found on coral reefs); Cuming.

Variety β. (Fig. *a* and *b*.)

Testa minor, ad basim subrugoso-sulcata, maculis albidis sparsis in medio et infernè cincta.

Shell smaller, grooved in a somewhat wrinkled manner at the base, encircled round the middle and lower part with scattered whitish spots.

Hab. Matnog, island of Luzon, Philippines; Cuming.

No one can fail to distinguish this characteristic species, which differs so entirely from the rest of the genus, by its peculiarly coronated spire and flat truncated apex, the latter character being especially deserving of notice, as it is the same in all stages of growth. The variety β, which I have taken some pains to illustrate, was collected by Mr. Cuming.

Species 175. (Mus. Cuming.)

CONUS CARINATUS. *Con. testâ elongato-turbinatâ, subcylindraceâ, supernè carinatâ; fuscâ, transversim lineatâ, lineis minutissimè articulatis; spirâ subdepressâ, spiraliter striatâ, fusco variegatâ.*

THE KEELED CONE. Shell elongately turbinated, somewhat cylindrical, keeled, as it were, round the upper part; brown, transversely lineated, lines minutely articulated; spire rather depressed, spirally striated, variegated with brown.

SWAINSON, Zool. Illus., 1st series, pl. 112.

Hab. Mauritius.

I have ventured to perpetuate the *Conus carinatus* of Swainson, though I strongly suspect it to be an extreme variety of that exceedingly variable species, the *Conus magus*.

Species 176. (Fig. *a* and *b*, Mus. Dennison.)

CONUS PANNICULUS. *Con. testâ subcylindraceo-turbinatâ, tenuiculâ, inflatâ, purpureo-carneolatâ, rubro-*

nigricante subtilissimè reticulatâ, trifasciatâ, fasciis lineis longitudinalibus undatis plus minusve vividè pictis; spirâ convexo-exsertâ, lineis undatis variegatâ; aperturæ fauce vividè purpureo-carneolatâ.

The ragged Cone. Shell somewhat cylindrically turbinated, rather thin, inflated, purple flesh-tinted, very finely reticulated with dark chocolate-brown, encircled with three bands, bands more or less vividly painted with waved longitudinal lines; spire convexly exserted, variegated with waved lines; interior of the aperture vividly stained with purple flesh-colour.

Lamarck, Anim. sans vert., vol. vii. p. 521.

Conus textile, var. g, Bruguière.

Hab. Seas of India; Lamarck.

The net-work of this highly interesting species is nearly as fine as that of the *Conus abbas*, but it is of very different pattern.

The two richly coloured specimens here figured, from the magnificent collection of J. Dennison, Esq., are very characteristic examples, the former presenting a much finer contrast of colour than can possibly be given in the representation.

177 a

177 b

177 c

178

179 a

179 b

162 b

Sowerby, del et lith.

prel. lith. Imp

CONUS.

PLATE XXXII.

Species 177. (Fig. *a*, *b* and *c*, Mus. Cuming.)

Variety α. Fig. *c*.

CONUS OMARIA. *Con. testâ cylindraceo-turbinatâ, albâ, interdum rosaceâ, aurantio-fusco subtilissimè reticulatâ, maculis irregularibus, albipunctatis, sæpissimè interspersâ; spirâ concavo-exsertâ, apice obtuso, roseo.*

THE PEARLED CONE. Shell cylindrically turbinated, white, sometimes rose-tinted, very finely reticulated with orange-brown, most frequently interspersed with irregular white-dotted blotches; spire concavely exserted, apex obtuse, rose-coloured.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 743.

LAMARCK, Anim. sans vert., vol. vii. p. 518.

Variety β. Fig. *a* and *b*.

Testa plerumque major, obesior, in medio subattenuata; reticulâ valdè latiore.

Shell generally larger, stouter, slightly attenuated in the middle; net-work much wider.

Conus pennaceus.

Hab. Ceylon, &c.

I do not see how Lamarck's *Conus pennaceus* can be separated as a distinct species from the *Conus omaria*, nor do I take his *Conus rubiginosus* to be anything more than a variety of the same. The reticulated painting of this shell is more than usually variable in its character, exhibiting the appearance of fine lace in some specimens, in others of coarse net-work, and the spots are no less inconstant, both as to size and arrangement.

Species 178. (Mus. Stainforth.)

CONUS MILLEPUNCTATUS. *Con. testâ turbinatâ, albidâ, maculis nigris confertis, parvis, numerosis, interdum cæsio-nebulosis, seriatim cingulatâ; spirâ plus minusve depressâ, spiraliter canaliculatâ et striatâ, maculis nigerrimis grandibus vividè pictâ.*

THE THOUSAND-SPOTTED CONE. Shell turbinated, whitish, encircled with a number of small close-set black spots, sometimes clouded with greyish blue; spire more or less depressed, spirally canaliculated and striated, vividly painted with large black spots.

LAMARCK, Anim. sans vert., vol. vii. p. 461.

Conus literatus, var., Bruguière.

Hab. Islands of Annaa, Taheite, &c., Pacific Ocean (found on the reefs); Cuming.

The *Conus millepunctatus* differs from the *Conus literatus* in the absence of the pale orange-brown bands, and in the spots being smaller, much more numerous, and occasionally clouded with greyish blue, as in the very characteristic specimen here represented.

Species 179. (Fig. *a* and *b*, Mus. Stainforth.)

CONUS STRIATUS. *Con. testâ subcylindraceo-turbinatâ, supernè coarctatâ, per totam superficiem striatâ, striis profundis, prominentibus; albidâ, roseo pallidè tinctâ, nigro plus minusve variegatâ, strigatâ, et maculatâ; spirâ subobtuso-convexâ, profundè canaliculatâ, apice rosaceo.*

THE STRIATED CONE. Shell somewhat cylindrically turbinated, contracted at the top, striated over the entire surface, striæ deep and prominent; whitish, stained with pale rose, more or less variegated, streaked, and spotted with black; spire rather obtusely convex, deeply canaliculated, apex tinged with rose.

Variety β. (Fig. 179 *b*.)

Testa fulvo-fusca variegata.

Shell variegated with yellowish brown.

LINNÆUS, Syst. Nat. (Gmelin's edit.), p. 3393.

LAMARCK, Anim. sans vert., vol. vii. p. 506.

Hab. Ceylon, &c.

This species is remarkably well characterized by the striæ, which are equally developed over its entire surface. Lamarck describes them as being interrupted over the white spaces, but it is only that they are less conspicuous from the absence of colour.

Species 162 *b*. (Mus. Stainforth.)

(Second notice.)

CONUS ABBAS. An additional figure, in consequence of the shell represented at Pl. XXVIII. Fig. 162. not being sufficiently characteristic of the fine net-work by which it is specifically distinguished.

181

180

182

183

184

186

185

Sowerby, del et lith.

prel. lith. Linn. imp

CONUS.

PLATE XXXIII.

Species 180. (Mus. Stainforth.)

CONUS CLASSIARIUS. *Con. testâ subabbreviato-turbinatâ, olivaceo-castaneâ, fasciâ albidâ centrali lineisque fuscis, interruptis, numerosis, cinctâ; spirâ subdepressâ, albidâ, olivaceo-fusco maculatâ; aperturæ fauce fusco tinctâ.*

THE NAVAL CONE. Shell rather shortly turbinated, olive-chestnut, encircled with a central white band, and a number of interrupted brown lines; spire rather depressed, whitish, spotted with olive-brown; interior of the aperture stained with brown.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 705.

LAMARCK, Anim. sans vert., vol. vii. p. 470.

Hab. Bay of Montija, West Columbia; Cuming.

The *C. classiarius* does not exhibit any very striking peculiarities; it approximates rather closely to certain dwarf varieties of the *Conus fumigatus*, but may be distinguished from that species by the continuous interrupted or dotted lines which encircle the entire surface.

Species 181. (Mus. Delessert.)

CONUS CALEDONICUS. *Con. testâ oblongo-turbinatâ, aurantiâ, filis tenuissimis, rubidis, parallelis, contiguis, cinctâ, filis inferioribus subtilissimè granulosis; spirâ subacuminatâ, obsoletè coronatâ, apice acuto.*

THE NEW CALEDONIA CONE. Shell oblong-turbinated, orange, encircled with a number of very fine, contiguous, parallel, reddish thread-like lines, the lower of which are very finely granulated; spire somewhat acuminated, obsoletely coronated, apex sharp.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 634.

LAMARCK, Anim. sans vert., vol. vii. p. 459.

Hab. Coast of New Caledonia, Pacific Ocean.

This interesting species is quite unknown in this country, and I am therefore much indebted to M. Delessert for allowing me to examine and obtain a drawing of the valuable specimen in his cabinet; it is in excellent preservation, and may probably be the same shell that Bruguière relates to have been brought from New Caledonia by Capt. Cook, as having passed first into the celebrated collection of the Duchess of Portland, and from thence into that of M. Hwass of Copenhagen.

Species 182. (Mus. Stainforth.)

CONUS VIRIDULUS. *Con. testâ turbinatâ, cæruleo-albidâ, flammis olivaceo-viridibus, longitudinalibus, undatis, variegatâ, flammis transversim lineatis, lineis interdum albo articulatis; spirâ planâ, valdè coronatâ, apice obtuso; aperturæ fauce basim versus cæruleo-nigricante tinctâ.*

THE GREENISH CONE. Shell turbinated, bluish white, variegated with longitudinal waved olive-green flames, flames transversely lined, lines sometimes articulated with white; spire flat, strongly coronated, apex obtuse; interior of the aperture stained towards the base with blue-black.

LAMARCK, Anim. sans vert., vol. vii. p. 446.

Conus fuscatus, var., Bruguière.

Hab. Seas of India.

I feel very much inclined to think with Bruguière, that the *Coni viridulus* and *fuscatus* are merely varieties of one and the same species. The character by which the former is separated by Lamarck, namely, the presence or absence of articulated white spots in the transverse lines, is very inconstant, and I venture to perpetuate the use of it more on account of its short peculiarity of form, and light sprinkled distribution of painting.

Species 183. (Mus. Cuming.)

CONUS LITERATUS. *Con. testâ oblongo-turbinatâ, albâ, zonis tribus pallidè aurantio-luteis, maculisque nigris, interdum longitudinaliter confluentibus, seriatim cinctâ; spirâ planâ, exsertiusculâ, leviter canaliculatâ.*

THE LETTER-MARKED CONE. Shell oblong-turbinated, white, encircled with three faint yellow-orange zones, and a number of rows of black spots, sometimes flowing longitudinally; spire flat, a little exserted, and slightly canaliculated.

LINNÆUS, Syst. Nat. (Gmelin's edit.), p. 3375.

LAMARCK, Anim. sans vert., vol. vii. p. 462.

Hab. Ceylon, &c.

No one can fail to recognise this well-known species, the chief peculiarities of which are the vivid hieroglyphical spots, and the three orange zones which encircle the upper, lower and middle portions of the shell.

Species 184. (Mus. Cuming.)

CONUS FUSCATUS. *Con. testâ subelongato-turbinatâ, in medio leviter attenuatâ; cæruleo-albidâ, maculis grandibus olivaceo-viridibus longitudinaliter inquinatâ, maculis interdum lineatis, interstitiis cæruleo-albidis pallidè articulatis; spirâ planâ, valdè coronatâ, apice obtuso; aperturæ fauce basim versus nigricante.*

THE DARKENED CONE. Shell elongately turbinated, slightly attenuated in the middle; bluish white, longitudinally bedaubed with large patches of olive-green, sometimes transversely lineated, the bluish white spaces being generally faintly articulated; spire flat, strongly coronated, apex obtuse; interior of the aperture blue-black at the base.

BORN, Ind. Mus., p. 126.

LAMARCK, Anim. sans vert., vol. vii. p. 446.

Hab. Seas of India.

This species approaches very closely to the *Conus imperialis*, though it differs constantly in size, colour, and general style of painting. The large bold blotches of dark olive-green are very characteristic.

Species 185. (Mus. Stainforth.)

CONUS MALDIVUS. *Con. testâ oblongo-turbinatâ, basim versus submucronatâ; albidâ, fasciis duabus latissimis, fusco-rubiginosis, variè interruptis, cinctâ, interstitiis fusco seriatim punctatis; spirâ convexâ, apice mucronato, elato; basi nigricante tinctâ.*

THE MALDIVE CONE. Shell oblong-turbinated, somewhat pointed towards the base; whitish, encircled with two very broad, variously interrupted reddish brown bands, the interstices between which are painted with rows of irregular brown dots; spire convex, apex raised and pointed; base stained with black.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 644.

LAMARCK, Anim. sans vert., vol. vii. p. 465.

Hab. Ceylon, &c.

This species has not been retained without diffidence; it possesses so many characters in common with the *Conus generalis*, that it is often extremely difficult to distinguish.

Species 186. (Mus. Stainforth.)

CONUS ROSEUS. *Con. testâ abbreviato-turbinatâ, supernè obesâ, transversim sulcatâ, rosea, punctis rubidis, perpaucis, subtilissimis, sparsis, indistinctè pictâ, in medio albifasciatâ; spirâ convexâ, tuberculis rudibus obtusis valdè coronatâ, interstitiis rubido-fuscis; basi livido-fuscâ.*

THE ROSE CONE. Shell shortly turbinated, stout at the upper part, transversely grooved, rose-coloured, indistinctly painted with a few very fine scattered reddish brown dots, white-banded in the middle; spire convex, strongly coronated with rude blunt tubercles, the interstices between which are reddish brown; base livid brown.

LAMARCK, Anim. sans vert., vol. vii. p. 458; Enc. Méth., pl. 322. fig. 7.

Conus lividus, var., Sowerby.

Hab. West Indies; Lamarck.

This excellent species approaches certain varieties of the *Conus lividus*; it is rarely found in good condition, but may be easily recognised by its rose-tinted hue, and by the specks of reddish brown in the interstices between the tubercles of the spire.

187 a

187 b

187 c

188

189 a

189 c

189 b

Sowerby del. et lith.

prel. lith. Lonn. imp.

CONUS.

PLATE XXXIV.

Species 187. (Fig. *a* and *b*, Mus. Stainforth.)

CONUS GUINAICUS. *Con. testâ turbinatâ, tenuiculâ, subinflatâ, lævi, basim versus sulcatâ; olivaceo-cinereâ, maculis albido-cæruleis nebulosis sparsis, interdum subobsoletis, bifasciatim ornatâ; spirâ convexo-obtusâ, spiraliter striatâ, suturis subsalebrosis; aperturæ fauce purpureo-fusco vividè tinctâ.*

THE GUINEA CONE. Shell turbinated, rather thin, a little inflated, smooth, grooved towards the base; olive-ash colour, ornamented with two bands of scattered, clouded, sometimes obsolete, bluish white spots; spire convexly obtuse, spirally striated, sutures somewhat rugged or uneven; interior of the aperture vividly painted with purple-brown.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 697.

LAMARCK, Anim. sans vert., vol. vii. p. 493; Enc. Méth., pl. 337. f. 4.

Variety β.

Testa cæruleo-albida, maculis rubido-fuscis sinuatis vividè et peculiariter nebulosa.

Shell bluish white, vividly and peculiarly clouded with sinuated dark reddish brown spots.

Enc. Méth., pl. 337. f. 6.

Hab. Coast of New Guinea; Hwass.

The varieties of the *Conus Guinaicus*, as above noted, the same mentioned by Lamarck, and figured in the 'Encyclopédie Méthodique,' exhibit such a remarkable contrast, both in colour and style of marking, that it requires no ordinary degree of observation to mark their complete specific relation in other respects.

Species 188. (Mus. Cuming.)

CONUS PAPILIONACEUS. *Con. testâ turbinatâ, albidâ, zonis tribus aurantio-fuscis, maculis tæniisque articulatis ornatis, cinctâ; spirâ depresso-planâ, aurantio-fusco maculatâ; apice mucronato.*

THE BUTTERFLY-WING CONE. Shell turbinated, whitish, encircled with three orange-brown zones, ornamented with a number of spots and articulated fillets of darker brown; apex pointed.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 665.

LAMARCK, Anim. sans vert., vol. vii. p. 476.

Hab. Mouth of the Gambia, Africa (found in clefts of rocks); Lieut. Shaw.

Lamarck particularizes four distinct varieties of this species; the pattern is however so exceedingly variable in its exact detail, that it is impossible to establish a scale of varieties with any degree of accuracy.

Species 189. (Fig. *a*, Mus. Stainforth; Fig. *b*, Mus. Cuming; Fig. *c*, Mus. Dennison.)

CONUS EPISCOPUS. *Con. testâ turbinatâ, solidâ, nunc elongatâ, nunc abbreviatâ, obesâ; albidâ aut rosaceâ, fusco latissimè reticulatâ, maculis perpaucis grandibus interruptâ, maculis albipunctatis; spirâ convexâ, apice obtuso.*

THE EPISCOPAL CONE. Shell turbinated, solid, sometimes elongated, sometimes short and stout; white or rose-tinted, very widely reticulated with dark brown, interrupted with a few large brown blotches dotted with white; spire convex, apex obtuse.

LAMARCK, Anim. sans vert., vol. vii. p. 522.

Hab. Ceylon, &c.

Few species are more variable in form than the *Conus episcopus*, some specimens being elongated and narrow, whilst others are short and stoutly shouldered; the latter is however the more common growth, and cannot well be confounded with its nearest allied species, the *Coni aulicus* and *magnificus*.

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190. a

190. b

190. c

190. d

191. a

191. b

190. e

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

CONUS.

PLATE XXXV.

Species 190. (Fig. *a*, *b* and *c*, Mus. Stainforth; Fig. *d* and *e*, Mus. Cuming.)

Variety α. (Fig. *b* and *d*.)

CONUS MAGUS. *Con. testâ cylindraceo-turbinatâ, subelongatâ, albâ, maculis grandibus sparsis livido-olivaceis aurantio-tinctis subfasciatim ornatâ, lineis olivaceo-fuscis, vel interruptis, vel punctatis, seu albi-articulatis, cinctâ; spirâ convexâ, apice elato, rosaceo.*

THE MAGICIAN CONE. Shell cylindrically turbinated, rather elongated, white, ornamented with large scattered, livid olive, orange-stained spots, and encircled with interrupted, dotted, or white-articulated olive-brown lines; spire convex, apex raised, tinged with rose.

LINNÆUS, Syst. Nat., p. 1171.

Conus magus, *Conus raphanus*, } Bruguière, Lamarck.

Hab. Philippine Islands (found on the reefs); Cuming.

Variety β. (Fig. *c*.)

Testa supernè tumidiuscula, maculis grandibus nigricante-fuscescentibus longitudinaliter undatim confluentibus; punctis perpaucis, sparsis.

Shell somewhat swollen at the upper part, with the large blotches, blackish brown, flowing longitudinally in a zigzag manner; dots few and scattered.

Hab. Mauritius (found on the reefs); Captain Caldwell.

Variety γ. (Fig. *a*.)

Testa cæruleo-albida, cæsio per totam superficiem longitudinaliter undatim nebulosa; lineis transversis confertis, albiarticulatis.

Shell bluish white, longitudinally clouded in a waved manner with grey; transverse lines close-set, articulated with white.

Hab. New Holland; H.M.S. Beagle.

Variety δ. (Fig. *e*.)

Testa maculis subobsoletis.

Shell with the blotches almost obsolete.

Hab. Island of Annaa or Chain island, Pacific Ocean (found on the reefs); Cuming.

Variety ε.

Testa maculis grandibus aurantiis, absque lineis transversis.

Shell with the large spots orange-coloured, without any transverse lines.

Hab. Mouth of the Gambia, West Africa (found in clefts of rocks); Lieut. Shaw.

The *Conus magus*, as its name somewhat indirectly signifies, is certainly the most variable species of the genus; it varies not only in colour and marking, but in form, and yet the seemingly anomalous varieties here figured are not without an ample portion of good specific identity and connection.

After carefully examining the numerous specimens of *Conus magus* with which our collections abound, I have thought it advisable to arrange them under five heads. These heads or varieties appear to be more or less strictly confined to as many different localities far distant from each other; and I think that when we are in possession of the correct habitats of such a widely distributed species as the *Conus magus*, a better plan of arrangement cannot well be adopted.

The Philippine variety (var. α) is by far the most numerous, and should be regarded as the type of the species.

The Mauritius variety (var. β) is comparatively scarce, very characteristic in its marking, and, most of all, peculiar in its form.

The New Holland variety (var. γ) is uniformly smaller than the rest, the painting is not distributed in any degree approaching to the style of bands, and it is the only one of which I have seen a granulated example.

The Pacific variety (var. δ) approaches nearly to the first-mentioned, and is more remarkable for its extreme delicacy, and deficiency of colour.

The African variety (var. ε) exhibits no other colour but a sombre orange-yellow, and scarcely a trace of the articulated transverse lines.

Species 191. (Fig. *a*, Mus. Stainforth; Fig. *b*, Mus. Dennison.)

CONUS ACHATINUS. *Con. testâ ovato-turbinatâ, solidiusculâ; albidâ, cæruleo-tinctâ, maculis luteo-olivaceis subobliquis grandibus ornatâ, lineis nigricantibus*

punctato-interruptis cinctâ; spirâ convexo-exsertâ, apice acuto.

The agate Cone. Shell ovately turbinated, rather solid; whitish, stained with blue, ornamented with large oblique yellowish olive spots, and encircled with blackish dot-interrupted lines; spire convexly exserted, apex sharp.

Chemnitz, Conch. Cab., vol. x. pl. 142. f. 1317.

Lamarck, Anim. sans vert., vol. vii. p. 480.

Testa rubida, granulosa.

Shell reddish, granulous.

Conus ranunculus, Lamarck.

The *Conus ranunculus* of Lamarck is merely a discoloured granulated example of the *Conus achatinus*, a fine specimen of which, from the collection of J. Dennison, Esq., is represented at Fig. *b*.

192

190 c

193

195 a

194

196

195 b

197 a

197 b

198

CONUS.

PLATE XXXVI.

Species 193. (Fig. 190 *f*.)

For description and more elaborate illustration of this species, which I believe to be the *Conus Adansoni* of Lamarck, though possibly an extreme variety of the *Conus magus*, see Pl. XLIII. Species 193.

Species 192. (Mus. Stainforth.)

CONUS METCALFII. *Con. testâ elongato-ovatâ, per totam superficiem granulosâ, granulis subtilibus, seriatim digestis; albidâ, aurantio-fusco irregulariter inquinatâ, balteâ albidâ angustâ in medio cingulatâ; spirâ subexsertâ, aurantio-fusco maculatâ, apice acuminato.*

METCALFE'S CONE. Shell elongately oval, granulated over its entire surface, granules very fine, ranged with great regularity; whitish, irregularly bedaubed with pale orange-brown, encircled with a narrow white belt round the middle; spire somewhat exserted, spotted with orange-brown, apex acuminated.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

I have much pleasure in naming this interesting species, at the desire of the Rev. Mr. Stainforth, in honour of William Metcalfe, Esq., a gentleman whose zeal for collecting and identifying the more minute and less attractive species of shells is highly serviceable to science.

Species 191. Fig. 193.

The shell here represented is one which I recognise as having seen in all the leading collections of Paris labelled "*Conus Adansoni*, Lamarck"; it does not accord so well, however, in my opinion, with '*le chotin*' of Adanson as the shell represented opposite to it at Fig. 190 *f*, for description of which I refer to Plate XLIII. Species 193. Both are undoubtedly connected with that extensive series of varieties already enumerated under the title of *Conus magus*; I propose however to consider this a variety of that species, and distinguish the *Conus Adansoni* from it, as did Lamarck, by the profusion of dotted transverse lines; and by its rounded stout-shouldered spire. In this shell the spire is rather depressed, and the dotted lines are almost obsolete.

Species 194. (Mus. Cuming.)

CONUS CLAVUS. *Con. testâ elongato-cylindraceâ, transversim striatâ, striis exilibus, elevatiusculis; albâ, cinnamomeo-fusco subtilissimè reticulatâ, reticulâ versus medium bifasciatim confertâ; spirâ convexâ, cinnamomeo-fusco tinctâ.*

THE NAIL CONE. Shell elongately cylindrical, transversely striated, striæ slender and rather elevated; white, very finely reticulated with light cinnamon-brown net-work, closed towards the middle in the form of two bands; spire convex, stained with cinnamon-brown.

LINNÆUS, Syst. Nat. (Gmel. edit.), p. 3390.

LAMARCK, Anim. sans vert., vol. vii. p. 547.

Conus teres, seu *Rete aureum*, Martini.

Conus auricomus, Hwass.

Hab. Philippine Islands; Cuming.

The *Conus clavus* is fully distinguished from any other species by its long cylindrical form, and very delicate cinnamon-coloured net-work.

Species 195. (Fig. *a* and *b*, Mus. Stainforth.)

CONUS VENULATUS. *Con. testâ subabbreviato-turbinatâ, lævi, luteo-fuscescente, aut fuscâ, aut nigerrimo-fuscâ, transversim lineatâ, lineis in fasciis duabus vel tribus sæpè coalescentibus, maculis niveis subtrigonis, irregulariter acervatis, partim vel omninò aspersâ; spirâ subdepressâ, fusco maculatâ et variegatâ.*

THE VEINED CONE. Shell rather shortly turbinated, smooth, yellowish brown, or brown, or very dark blackish brown, transversely lineated, lines often uniting so as to form two or three bands, and partially or entirely sprinkled with somewhat triangular snow-white spots irregularly heaped together in places; spire rather depressed, spotted and variegated with brown.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 695.

LAMARCK, Anim. sans vert., vol. vii. p. 491.

Varieties.

Conus nivosus, Lamarck.

Conus nivifer, Broderip.

Hab. Cape de Verd Islands, Philippine Islands, &c.

This species, though varying exceedingly in intensity of colour, is nevertheless highly characterized by its ir-

regular sprinkling of snow-white flakes. The interior of the aperture is sometimes faintly stained with pink.

Species 196. (Mus. Stainforth.)

CONUS AUREUS. *Con. testâ elongato-cylindraceâ, transversim subtilissimè sulcatâ; albâ, strigis fulvo-cinnamomeis latissimis, fusco virgatis, longitudinaliter inquinatâ, interstitiis fusco exiliter reticulatis; spirâ convexo-exsertâ.*

THE GOLDEN CONE. Shell elongately cylindrical, transversely very finely grooved; white, longitudinally bedaubed with very broad streaks of cinnamon-yellow striped with brown, the interstices between the broad streaks being finely reticulated with brown; spire convexly exserted.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 742.
Conus auricomus, Lamarck.

Hab. Island of Amboyna, Philippines; Cuming.

I find, upon looking to the origin of this beautiful species, commonly known to collectors as the *Conus auricomus*, that it was first described by M. Hwass under the title of *Conus aureus*; it is therefore expedient that that name should be restored to it. The familiar appellation of *auricomus* must now be expunged from the nomenclature, for the *Conus auricomus*, Hwass, is the *Conus clavus*, Linnæus, and the *Conus auricomus*, Lamarck, is the *Conus aureus*, Hwass.

Species 197. (Fig. *a*, Mus. Cuming; Fig. *b*, Mus. Stainforth.)

CONUS SENATOR. *Con. testâ turbinatâ, lævi, basim versus granulosâ; rubido-flavescente, interdum pallidè ferrugineâ, balteâ albidâ angustâ, centrali, filisque fuscis numerosis sæpissimè cingulatâ; spirâ convexo-obtusâ, fusco vividè maculatâ.*

THE SENATOR CONE. Shell turbinated, smooth, granulated towards the base; reddish yellow, sometimes pale rusty brown, generally encircled with a narrow central white belt, and a number of brown thread-like lines; spire convexly obtuse, vividly spotted with brown.

LINNÆUS, Syst. Nat., p. 1168.

MARTINI, Conch. Cab., vol. ii. pl. 59. f. 659.
Conus planorbis, Born.
Conus polyzonias, Gmelin.
Conus ferrugineus, (*var.*) Bruguière.
Conus vulpinus, Bruguière; Lamarck.

Variety β. (Fig. 197 *b*.)

Testa omninò granulata.
Shell entirely granulated.
Hab. Coast of Guinea; Lamarck.

The ground-colour of this shell varies so exceedingly from reddish yellow to pale rusty brown, that I have not thought it necessary to distinguish even as special varieties the shells described by Bruguière as distinct species. Thus do the arbitrary limits of classification become gradually broken up by the discovery of intermediate modifications.

Species 198. (Mus. Cuming.)

CONUS MILIARIS. *Con. testâ abbreviato-turbinatâ, obesâ; basim versus granulatâ; carneâ, maculis niveis, obliquè undulatis, bifasciatim ornatâ, lineis subtilibus rufescente-fuscis punctato-interruptis profusè cinctâ; spirâ subdepressâ, spiraliter striatâ, valdè coronatâ, tuberculis albidis, interstitiis rufescente-fuscis; apice rosaceo.*

THE MILLET CONE. Shell shortly turbinated, stout, granulated towards the base; flesh-colour, ornamented with two bands of obliquely waved snow-white flakes, and encircled with a number of very fine dot-interrupted reddish brown lines; spire somewhat depressed, spirally striated, strongly coronated, tubercles whitish, interstices reddish brown; apex rose-tinted.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 629.

LAMARCK, Anim. sans vert., vol. vii. p. 456.

Hab. China; Lamarck. Island of Annaa, Pacific Ocean (found on the reefs); Cuming.

This is perhaps the nearest allied species to *C. minimus*, but perfectly distinct.

199

200

201

202 a

203

204

202 b

205 a

205 b

206

CONUS.

PLATE XXXVII.

Species 199. (Mus. Stainforth.)

CONUS CEYLANENSIS. *Con. testâ obeso-turbinatâ, lævi, basim versus granulosâ, albidâ, fasciâ olivaceâ latâ, cæsio-albido longitudinaliter flammulatâ, cinctâ; spirâ subdepressâ, subtiliter coronatâ, apice obtuso; basi et aperturæ fauce violaceâ.*

THE CEYLON CONE. Shell stoutly turbinated, smooth, finely granulated towards the base, whitish, encircled with a broad olive band, longitudinally flamed with bluish white; spire rather depressed, coronated, apex obtuse; base and within the aperture dark violet.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 636.

LAMARCK, Anim. sans vert., vol. vii. p. 462.

Hab. Ceylon, Philippine Islands (found on coral reefs, under stones at low water); Cuming.

I am not aware of any species that can be confounded with the *Conus Ceylanensis*; it is not common.

Species 200. (Mus. Stainforth.)

CONUS ACUTANGULUS. *Con. testâ oblongo-turbinatâ, subfusiformi, transversim sulcatâ, sulcis punctato-pertusis; albidâ, aurantio-fusco plus minusve variegatâ et maculatâ; spirâ elevato-exsertâ, margine peracutè liratâ, apice mucronato.*

THE SHARP-ANGLED CONE. Shell oblong-turbinated, somewhat fusiform, transversely grooved, grooves pricked with dots; whitish, more or less variegated and spotted with orange-brown; spire elevated, exserted, sharply ridged round the edge, apex pointed.

CHEMNITZ, Conch. Cab., vol. xi. pl. 182. f. 1772 and 1773.

LAMARCK, Anim. sans vert., vol. vii. p. 498.

Hab. Misamis, Island of Mindanao, Philippines (found at the depth of twenty-five fathoms); Cuming.

This little fusiform shell may be recognised by the peculiar manner in which the grooves which cover its entire surface are pricked.

Species 201. (Mus. Stainforth.)

CONUS VERRUCOSUS. *Con. testâ subfusiformi-turbinatâ, seriatim granulatâ, granulis magnis, prominentibus; albidâ, fulvo vel rubido-fusco variegatâ, granulis albidis; spirâ elevato-exsertâ, margine acutangulo, granulato.*

THE WARTY CONE. Shell somewhat fusiformly turbinated, granulated, granules large and prominent; whitish, variegated with yellow or reddish brown, granules white; spire elevated, exserted, sharp-angled and granulated round the edge.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 708.

LAMARCK, Anim. sans vert., vol. vii. p. 498.

Conus granulatus, Martini.

Hab. Coast of Senegal and Mozambique; Lamarck.

The granules of this Cone exhibit a degree of specific importance which is not apparent in the ordinary granulated varieties of smooth Cones; they are larger and more fully developed.

Species 202. (Fig. *a* and *b*, Mus. Deshayes, Paris.)

CONUS VICTORIÆ. *Con. testâ ovato-turbinatâ, tenui, subinflatâ, transversim striatâ; albidâ, cæsio longitudinaliter inquinatâ, maculis grandibus, subsolitariis, aurantiis, fusco undulato-virgatis, trifasciatim ornatâ, interstitiis aurantio-fusco subtilissimè reticulatis; spirâ elevato-exsertâ, apice acutissimo; aperturâ latiusculâ, fauce pallidè cæsiâ.*

QUEEN VICTORIA'S CONE. Shell ovately turbinated, thin, rather inflated, transversely striated; whitish, longitudinally streaked or bedaubed with greyish blue, and ornamented with three rows of large solitary orange spots striped in a waved manner with brown, the interstices being very finely reticulated with orange-brown; spire elevated, exserted, apex very sharp; aperture rather wide, interior of the aperture pale bluish grey.

Variety β.

Testa maculis aurantiis majoribus, trifasciatim coalescentibus; strigis fuscis longitudinalibus prominentioribus.

Shell with the orange spots larger, and united together in bands; the brown longitudinal streaks more prominent.

REEVE, Pro. Zool. Soc., 1843.

Hab. Mouth of the Victoria River, New Holland; H.M.S. *Beagle*.

This highly interesting species must be seen to be appreciated, it being quite impossible to do justice either

by drawing or description to its elaborate configuration. It is perhaps next allied to the *Conus canonicus*, but is of much lighter and more inflated growth; the three rows of brown-striped orange blotches are peculiar to it; the network is finer, and of a much more delicate and tremulous character, and the interior of the aperture, instead of being pink, is of the same greyish blue colour which characterizes the outer surface.

I take the liberty of attaching Her Majesty's name to this beautiful shell, from the circumstance of its having been lately discovered in a locality dedicated in like manner to the same fair patroness of the sciences.

The two specimens here figured, recently in my possession, were collected during the late surveying expedition of H.M.S. *Beagle*. Mr. Cuming and the Rev. Mr. Stainforth each possess several examples.

Species 203. (Mus. Cuming.)

CONUS SCALPTUS. *Con. testâ turbinatâ, solidiusculâ, politâ, basim versus sulcatâ; albidâ, filis rubidis numerosis, rariter interruptis, cinctâ; spirâ elevatâ, spiraliter striatâ, rubro variegatâ, apice acuto.*

THE SCRATCHED CONE. Shell turbinated, rather solid, polished, grooved towards the base; whitish, encircled with a number of rarely interrupted reddish thread-like lines; spire elevated, spirally striated, variegated with red, apex sharp.

REEVE, Pro. Zool. Soc., 1843.

Hab. —— ?

This is a new and very distinct species; the transverse lines exhibit the appearance of scratches and are very characteristic. M. Chenu of Paris proposed describing this shell under the title of *C. radiatus*, but that name has been applied to another species by Gmelin, though not acknowledged.

Species 204. (Mus. Cuming.)

CONUS MUCRONATUS. *Con. testâ acuminato-turbinatâ, basim versus attenuatâ, transversim sulcatâ, sulcis striis longitudinalibus cancellatis; albidâ, fusco pallidè tinctâ et variegatâ; spirâ elato-exsertâ, fusco pallidè maculatâ, apice mucronato, acuto.*

THE POINTED CONE. Shell acuminately turbinated, attenuated towards the base, transversely grooved, grooves cancellated with longitudinal striæ; whitish, stained and variegated with pale brown; spire raised, exserted, spotted with pale brown, apex sharp-pointed.

REEVE, Pro. Zool. Soc., 1843.

Hab. Islands of Burias, Siquijor, Penay, &c., Philippines; Cuming.

Several examples of this species have been collected by Mr. Cuming, varying remarkably in their general appearance; most of them are obsoletely coronated, and all have the grooves more or less strongly developed, with the apex remarkably sharp-pointed. *Coni sulcatus* and *orbitatus* are the nearest allied species.

Species 205. (Fig. *a*, Mus. Cuming; Fig. *b*, Mus. Metcalfe.)

CONUS CUNEOLUS. *Con. testâ abbreviato-turbinatâ, supernè obesâ, subinflatâ; fuscâ, maculis albidis paucis parvis, irregularibus, subtrigonis, fasciatim aspersâ, fasciâ albidâ, fusco pallidè strigatâ, interdum subobsoletâ, infra medium ornatâ; spirâ convexo-obtusâ.*

THE LITTLE WEDGE CONE. Shell shortly turbinated, stout at the upper part, rather inflated; brown, sprinkled in a band-like manner with a few small irregular triangular white spots, and ornamented with a white band just below the middle, palely streaked with brown, which is sometimes nearly obsolete; spire convexly obtuse.

REEVE, Pro. Zool. Soc., 1843.

Hab. —— ?

This apparently variable species approximates in some degree to the *Conus mercator*.

Species 206. (Mus. Belcher.)

CONUS VOLUMINALIS. *Con. testâ turbinatâ, supernè valdè acutangulâ, lævi, basim versus sulcatâ; albâ, maculis fuscis perpaucis grandibus, hieroglyphicis, biseriatim cinctâ; spirâ peculiariter concavo-depressâ, fusco tessellatâ, striis duabus spiraliter incisâ, apice elato, acutissimè mucronato.*

THE ROLLER CONE. Shell turbinated, very sharply angled at the upper part, smooth, grooved towards the base; white, encircled with two rows of large hieroglyphical brown spots; spire peculiarly concavely depressed, tessellated with brown, and spirally engraved with two striæ, apex very sharply pointed.

HINDS, Pro. Zool. Soc., 1844.

Hab. Straits of Malacca; Hinds.

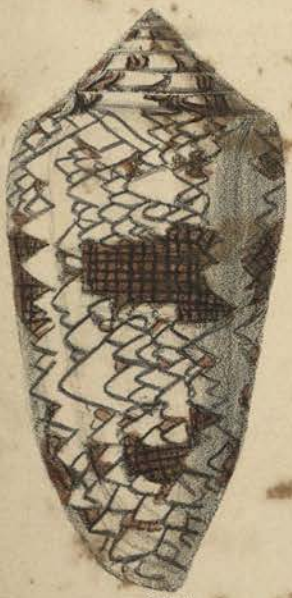
This exceedingly delicate shell has a remarkably depressed spire, although it is raised in the centre to a point as sharp as a needle.

207

206 a

206 b

209



210 a

210 b

211

Sowerby, del et lith

prel. lith Linn. imp

CONUS.

PLATE XXXVIII.

Species 207. (Mus. Stainforth.)

CONUS FLAVIDUS. *Con. testâ turbinatâ, solidiusculâ, supernè subrotundatâ, transversim striatâ, striis elevatiusculis, subdistantibus, inferioribus plus minusve granosis; flavido-rubente, balteâ pallidâ angustâ subindistinctâ in medio cinctâ; spirâ obtuso-convexâ, immaculatâ, spiraliter striatâ, apice rosaceo; aperturæ fauce supernè et infernè purpureo-violaceo tinctâ.*

THE YELLOW-TINGED CONE. Shell turbinated, rather solid, somewhat rounded at the upper part, transversely striated, striæ rather elevated, lower striæ more or less granulous; warm yellowish red, encircled round the middle with a pale indistinct narrow belt; spire obtusely convex, unspotted, spirally striated, apex rose-tinted; interior of the aperture stained at the upper and lower parts with deep purple-violet.

LAMARCK, Anim. sans vert., vol. vii. p. 468.

Hab. Taheite, Society Islands (found on coral reefs); Cuming.

Lamarck very justly observes that the *Conus flavidus* differs from the *Conus vulpinus* in the spire not being spotted; it is however with the *Conus lividus* that a comparison should be instituted: the former is a shell of lighter composition, and altogether of essential specific difference; the latter differs only in colour and in being coronated, differences which are not essentially specific.

Species 208. (Fig. *a* and *b*, Mus. Stainforth.)

CONUS VERRICULUM. *Con. testâ cylindraceo-turbinatâ, ventricosâ, subrotundatâ, lævi, basim versus striatâ; albidâ, maculis aurantiis irregularibus bifasciatim cinctâ, aurantio-fusco aliter latissimè reticulatâ; maculis lineis undulatis nunc transversim, nunc longitudinaliter strigatis; spirâ concavo-acuminatâ.*

THE DRAG-NET CONE. Shell cylindrically turbinated, ventricose, somewhat rounded, smooth, striated towards the base; whitish, encircled with two rows of irregular orange spots, and very widely reticulated elsewhere with orange-brown; spots streaked with waved brown lines, sometimes transversely (as in Fig. *a*), sometimes longitudinally (as in Fig. *b*); spire concavely acuminated.

Conus textile, var. *l*, Lamarck.

Hab. Ceylon, &c.

Many persons will no doubt cavil at my attaching a new specific name to this long-established variety of the *Conus textile*, but how can Lamarck's *Conus vicarius* stand, unless this shell be elevated to the same rank? Its inflated growth and the wide open character of the net-work are somewhat constant, and it may as well be noticed that the *Conus verriculum* has long been erroneously set apart by collectors for the *Conus archiepiscopus* (Plate XLI. Species 223.), a very different shell, and one of much greater rarity. Either the *Conus verriculum* must be adopted; or the *Conus vicarius* must be rejected, and both considered as varieties of the *Conus textile*.

There can, however, be no law for the adjudication of species, whilst a species remains to be defined. If the *Coni vicarius* and *verriculum* be discarded, so must the *Conus flavidus* just spoken of, and hundreds of species may be banished in like manner from the nomenclature, as the links in the grand chain of affinity between the *Aspergillum* and the *Argonaut* become gradually revealed to observation.

Species 209. (Mus. Rucker.)

CONUS TEXTILE. *Con. testâ cylindraceo-ovatâ, lævi, basim versus striatâ; albâ, maculis grandibus aurantiis, irregularibus bifasciatim cinctâ, aurantio-fusco aliter trigono-reticulatâ; maculis lineis fuscis undulatis longitudinaliter strigatis; spirâ concavo-acuminatâ.*

THE CLOTH-OF-GOLD CONE. Shell cylindrically ovate, smooth, striated towards the base; white, encircled with two rows of large irregular orange blotches, and triangularly reticulated elsewhere with orange-brown; spots streaked longitudinally with waved brown lines; spire concavely acuminated.

LINNÆUS (Gmel. edit.), p. 3393.

LAMARCK, Anim. sans vert., vol. vii. p. 523.

Hab. Ceylon, Society Islands, &c.

Lamarck enumerates eleven varieties of this species but they are all so exceedingly variable, and of such intimate connection, that it is quite unnecessary to follow them in detail.

Species 210. (Fig. *a*, Mus. Cuming; Fig. *b*, Mus. Stainforth.)

CONUS VICARIUS. *Con. testâ oblongo-ovatâ, in medio attenuatâ, lævi, basim versus striatâ; albâ, maculis grandibus aurantiis vel citrinis irregularibus bifasciatim cinctâ, aurantio fusco, nunc latissimè, nunc subtiliùs, aliter reticulatâ; maculis lineis fuscis undulatis reticulatis; spirâ concavo-acuminatâ.*

THE LIEUTENANT CONE. Shell oblong-ovate, attenuated in the middle, smooth, striated towards the base; white, encircled with two rows of large orange or citron blotches, and reticulated elsewhere, either widely, or more finely, with orange-brown; spots crossed with transverse and longitudinal brown waved lines; spire concavely acuminated.

LAMARCK, Anim. sans vert., vol. vii. p. 482.

Hab. Island of Mauritius.

Having already spoken of this species in treating of the *Conus verriculum*, it will only be necessary to observe that it differs from the *Conus textile* in being of a more oblong angular shape, resembling, says Lamarck, the form of the *Conus ammiralis*, and the orange blotches may be said to differ in being crossed both transversely and longitudinally with brown lines.

Species 211. (Mus. Stainforth.)

CONUS LIVIDUS. *Con. testâ turbinatâ, solidiusculâ, transversim striatâ, striis inferioribus sæpè granulosis; livido-viridescente, balteâ pallidâ subindistinctâ in medio cinctâ; spirâ coronatâ, tuberculis grandibus, albidis, apice pallidè rosaceo; aperturæ fauce supernè et infernè violaceo-purpureo tinctâ.*

THE LIVID CONE. Shell turbinated, rather solid, transversely striated, lower striæ often granulous; livid green, encircled round the middle with a pale indistinct narrow belt; spire coronated, tubercles large and whitish, apex palely tinged with rose; interior of the aperture deeply stained at the upper and lower parts with purple-violet.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 630.

LAMARCK, Anim. sans vert., vol. vii. p. 457.

Hab. Society and Philippine Islands; Cuming.

There are varieties of this species which exhibit the same warm yellowish red tinge as the *Conus flavidus*, differing only in being coronated.

212.

213. a.

213. b.

214. a.

214. b.

215.

216.

Sowerby, del et lith.

Frederic Reeve, imp.

CONUS.

Plate XXXIX.

Species 212. (Mus. Cuming.)

Conus Porto-Ricanus. *Con. testâ subpyriformi, transversim granulatâ, granulis compressis, subdistantibus; albâ, incarnato-fusco bifasciatim flexuoso-maculatâ; spirâ elato-convexâ, apice obtuso.*

The Porto Rico Cone. Shell somewhat pyriform, transversely granulated, granules compressed, rather distant; white, encircled with two rows of fleshy brown flexuous spots or blotches; spire elevately concave, apex obtuse.

Hwass, Enc. Méth. vers, vol. i. part 2. p. 714.

Lamarck, Anim. sans vert., vol. vii. p. 502.

Hab. Island of Porto Rico, West Indies; Bruguière.

I have no very good opinion of this species so nearly allied to the *Conus testudinarius*; it is certainly somewhat peculiarly granulated, and is of a more pyriform shape, but these differences are rather unimportant, when compared with the fact that both are from the same locality.

Species 213. (Fig. *a* and *b*, Mus. Delessert, Paris.)

Conus Delessertianus. *Con. testâ obeso-fusiformi, ad basim sulcatâ, sulcis prominentibus; albido-lutescente, fasciis tribus rubido-aurantiis cinctâ, maculis rubidis rhomboidibus minutis per totum aspersâ, maculis super fascias majoribus, interdum longitudinaliter confluentibus; spirâ valdè elatâ, subcanaliculatâ, maculis rubidis vividè aspersâ, apice mucronato, acuto; labro tenuiculo, arcuato, juxta spiram emarginato.*

Delessert's Cone. Shell stoutly fusiform, grooved at the base, grooves prominent; pale yellow, encircled with three reddish orange bands, sprinkled over the entire surface with very small reddish rhomboid spots, the spots over the bands larger, and flowing together; spire considerably raised, slightly canaliculated, and vividly sprinkled with reddish spots, apex sharp-pointed; lip rather thin, curved, and emarginated next the spire.

Recluz, Mag. de Zool., 1843.

Hab. ——?

This beautiful and very striking shell, which I remember to have seen two or three years since in the collection of the late M. Tessier of Paris, is remarkable both on account of its symmetry of form and its peculiar though simple style of colouring; and I know of no other species with which any comparison can well be instituted.

There is another specimen in the collection of the Rev. Mr. Stainforth.

Species 214. (Fig. *a* and *b*, Mus. Cuming.)

Conus testudinarius. *Con. testâ turbinatâ, supernè tumidiusculâ, lævi, basim versus striatâ; albidâ, cæruleo plus minusve tinctâ, maculis nigerrimo-fuscis, supra et infra undatim et irregulariter confluentibus, bifasciatim cinctâ; spirâ subrotundatâ, convexâ, spiraliter striatâ, apice subacuto.*

The tortoise-shell Cone. Shell turbinated, rather swollen round the upper part, smooth, striated towards the base; whitish, more or less stained with blue, encircled with two bands of dark brown spots flowing above and below in a waved and irregular manner; spire somewhat rounded, convex, spirally striated, apex rather sharp.

Martini, Conch. Cab., vol. ii. p. 250. pl. 55. fig. 605.

Lamarck, Anim. sans vert., vol. vii. p. 490.

Hab. West Indies.

The *Conus testudinarius* may be recognised by the peculiarly waved character of the dark marking upon a blue-tinged ground. Mr. Sowerby's *Conus aspersus*, 'Conchological Illustrations,' f. 16, is a worn overgrown example of this species.

Species 215. (Mus. Stainforth.)

Conus fulmen. *Con. testâ subelongato-ovatâ, lævi, basim versus leviter sulcatâ; pallidè roseo-purpureâ, in medio albibalteatâ, strigis latis, purpureo-fuscis, perpaucis, undatis, prominentibus, longitudinaliter inquinatâ; spirâ obtuso-convexâ, purpureo-fusco variegatâ, apice roseo.*

The thunderbolt Cone. Shell somewhat elongately ovate, smooth, slightly grooved towards the base; pale rose-purple, white round the middle, longitudinally bedaubed with two or three very prominent, broad, waved purple-brown streaks; spire obtusely convex, variegated with purple-brown, apex rose-tinted.

Reeve, Pro. Zool. Soc., 1843.

Hab. Island of Capul, Philippines (found on the reefs); Cuming.

The specimens found by Mr. Cuming at the above-mentioned island are of much smaller size than that here represented; they are however highly characteristic, and assist materially to establish the species.

Species 216. (Mus. Stainforth.)

Conus Franciscanus. *Con. testâ turbinatâ, lævi, castaneo-fuscâ, fasciis albidis duabus cinctâ, superiore angustâ, per spiræ basim decurrente; spirâ obtuso-convexâ, castaneo-fuscâ.*

The Franciscan Cone. Shell turbinated, smooth, chestnut-brown, encircled with two white bands, the upper of which is rather narrow, running around the base of the spire; spire obtusely convex, chestnut-brown.

Hwass, Enc. Méth. vers, vol. i. part 2. p. 698.

Lamarck, Anim. sans vert., vol. vii. p. 493.

Hab. Mediterranean; Lamarck.

This shell is very rarely to be found in good condition; a small specimen in the collection of the Rev. Mr. Stainforth is the only one I remember to have seen.

217a

69

211.

218a

218b

219a

219b

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CONUS.

Plate XL.

Species 217. (Fig. *a*, Mus. Hinds; Fig. *b*, Mus. Cuming.)

Conus Martinianus. *Con. testâ cylindraceo-turbinatâ, fuscâ, vel luteolo-fuscâ, ad basim, et per spiræ marginem, albidâ; lævi, infra medium sulcatâ, sulcis latiusculis, subdistantibus, striis prominentibus cancellatis; spirâ convexâ, spiraliter sulcatâ, sulcis numerosis, angustis, apice elato, acuto.*

Martini's Cone. Shell cylindrically turbinated, brown or yellowish brown, whitish at the base, and around the edge of the spire; grooved below the middle downwards, grooves rather wide, somewhat distant, cancellated with prominent striæ; spire convex, spirally grooved, grooves numerous, narrow, apex raised and acute.

Conus teres lævis, Martini, Conch. Cab., vol. ii. p. 233. pl. 53. f. 584.

Conus lacteus, var.? Lamarck.

Hab. Putao, province of Albay, island of Luzon, Philippines (found under stones at low water); Cuming.

This species has been either injudiciously confounded by Lamarck with the *Conus lacteus*, or it has been altogether neglected. Martini has given a very accurate figure of it, but his irregular style of nomenclature precludes the possibility of our following the title by which he distinguished it. The *Conus spectrum* is described by that author under the name of *Conus teres*, and this immediately follows under that of *Conus teres lævis*; the former is however a shell of a more inflated growth, and distinguished moreover by markings of which the *Conus Martinianus* is entirely destitute. Most specimens exhibit a longitudinal white streak here and there, running parallel with the lines of growth, as in the shell represented at fig. 217 *b*.

Species 69. (Mus. Cuming.)

(Second notice.)

Conus furvus.

Since I had the pleasure of describing this species at Plate XIII., a much finer and more characteristic example has presented itself, confirming the impression I at that time formed of its being new to science.

Species 218. (Fig. *a* and *b*, Mus. Cuming.)

Conus regalitatis. *Con. testâ subpyriformi-turbinatâ, leviter ventricosâ, lævi, basim versus liratâ, liris angustis, subdistantibus; nigricante-fuscâ, cæruleo tinctâ, maculis punctisque albido-cærulescentibus variâ; spirâ convexâ, leviter canaliculatâ, lineis elevatiusculis spiraliter notatâ, nigricante-fuscâ, versus apicem rubido variegatâ, apice elato, acuto.*

The royalty Cone. Shell somewhat pyriformly turbinated, slightly ventricose, smooth, ridged towards the base, ridges narrow, rather distant; blue-tinged blackish brown, variegated with spots and dots of pale blue; spire convex, slightly canaliculated, spirally marked with rather elevated lines, blackish brown, variegated with red towards the apex, apex raised, acute.

Sowerby, Pro. Zool. Soc., 1834; Conch. Illus. f. 87.

Hab. Real Llejos, Central America (found on sandy mud in the clefts of rocks); Cuming.

The *Conus regalitatis* approximates in some measure to the *Conus purpurascens*; it does not however exhibit much variety of light purple colouring, nor that peculiar sharp-angled growth round the upper part, which gives a squareness to the aperture in that species. The spire is singularly characterized by the absence of any purple colouring beyond the first or second outer whorl.

Species 219. (Fig. *a*, Mus. Stainforth; Fig. *b*, Mus. Cuming.)

Conus Proteus. *Con. testâ turbinatâ, solidâ, albâ, guttis maculisque fuscis vel rubido-fuscis, nunc separatis, nunc confusis, seriatim pictâ; spirâ depressiusculâ, subcanaliculatâ, fusco maculatâ, apice acuminato.*

The Proteus Cone. Shell turbinated, solid, white, painted with rows of brown or reddish brown spots and blotches, sometimes separated, sometimes confounded together; spire rather depressed, slightly canaliculated, spotted with brown, apex acuminated.

Hwass, Enc. Méth. vers, vol. i. part 2. p. 682.

Lamarck, Anim. sans vert., vol. vii. p. 486.

Variety?

Conus pseudo-Thomæ, Chemnitz.

Hab. Island of St. Thomas; West Indies.

The spots and blotches of this shell vary considerably in their shape and arrangement; in some specimens they

assume the appearance of broad interrupted transverse lines, in others that of longitudinal or waved lines, and these again are often heaped together in large irregular patches. The *Conus leoninus* is the nearest allied species to the *Conus Proteus*, and is said to differ in the spots being always smaller and more numerous; for my own part I now regard them merely as varieties of the same, and much regret having separated them in this monograph.

220b

220a

221

222

223a

223b

224

Sowerby del. et lith.

pret. lith. Linn. imp.

CONUS.

PLATE XLI.

Species 220. (Fig. *a* and *b*, Mus. Cuming.)

CONUS CINEREUS. *Con. testâ oblongo-turbinatâ, subcylindraceâ, columellâ subattenuatâ; lævi, sulcis distantibus angustis basim versus cinctâ; cinereo-cærulescente, subfasciatâ, maculis punctisque fuscis, albo interdum articulatis, seriatim digestis, ornatâ; spirâ convexâ, fusco-maculatâ, apice mucronato, elato.*

THE ASH-COLOURED CONE. Shell oblong-turbinated, somewhat cylindrical, columella a little attenuated; smooth, encircled towards the base with narrow distant grooves; ashy blue, faintly banded, ornamented with brown spots and dots, sometimes articulated with white, set in rows; spire convex, spotted with brown, apex raised, pointed.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 673.

LAMARCK, Anim. sans vert., vol. vii. p. 480.

Voluta cinerea, Rumphius.

Conus rusticus, Linnæus.

Conus cærulescens, Lamarck.

Conus lividus, Chemnitz.

Hab. Bay of Manila (found on mud-banks at low water); Cuming.

Variety β.

Testa fulva, maculis punctisque spadiceis; vel omninò fulvo-spadicea maculis punctisque nullis.

Shell yellowish, with the spots and dots chestnut-brown; or altogether yellowish chestnut without any spots or dots.

Monachus Franciscanus, Chemnitz, Conch. Cab., vol. ii. pl. 142. f. 1319 and 1320.

Conus modestus, Sowerby, Conch. Illus. f. 19.

Hab. Mariveles, province of Bataan, island of Luzon, Philippines (found in sandy mud at the depth of seven fathoms); Cuming.

The *Conus cinereus* approximates in some measure to the *Conus stramineus*; it exhibits however a different style of painting, and the columella is more peculiarly attenuated towards the base.

Species 221. (Mus. Cuming.)

CONUS INCARNATUS. *Con. testâ turbinatâ, vix pyriformi, basim versus subtilissimè liratâ, liris numerosis, confertis; albâ, fasciis duabus latissimis, pallidè incarnatis, cinctâ; spirâ convexiusculâ, spiraliter incisâ, maculis incarnatis arcuatis pallidè variegatâ, apice mucronato, elato.*

THE FLESH-BANDED CONE. Shell turbinated, slightly pyriform, very finely ridged towards the base, ridges numerous and close-set; white, encircled with two very broad pale flesh-coloured bands; spire slightly convex, spirally engraved, palely variegated with curved flesh-coloured spots, apex raised, pointed.

REEVE, Pro. Zool. Soc., 1843.

Hab. Malacca (found on mud-banks); Cuming.

Although the specimen above described is in the best state of preservation, I should have judged it, from its simple style of colouring, to be a shell of immature growth, were it not that Mr. Cuming collected several specimens of them at Malacca on the mud-banks, all exhibiting the same uniformity of external character.

Species 222. (Mus. Stainforth.)

CONUS AMADIS. *Con. testâ turbinatâ, subinflatâ, lævi, basim versus sulcatâ, sulcis peculiariter pertusis; aurantio- vel rubido-fuscâ, maculis niveis trigonocordatis, inæqualibus, confertis, lineisque transversis raris, albo articulatis, ornatâ; spirâ lævi, canaliculatâ, fuscâ, maculis albis grandibus notatâ, apice acuminato, elato.*

THE AMADIS CONE. Shell turbinated, somewhat inflated, smooth, grooved towards the base, grooves peculiarly pricked; orange or reddish brown, ornamented with unequal, close-set, white, triangularly heart-shaped spots, and a very few white articulated transverse lines; spire smooth, canaliculated, brown, marked with large white spots, apex raised and acuminated.

MARTINI, Conch. Cab., vol. ii. p. 290. pl. 58. f. 642 and 643.

LAMARCK, Anim. sans vert., vol. vii. p. 489.

L'Amadis, Argenville.

Hab. Ceylon (in great abundance).

The white spots, which are of very irregular character, are generally arranged so as to leave two narrow zones of the dark ground-colour, the upper of which is usually the broader.

Species 223. (Fig. *a* and *b*, Mus. Stainforth.)

Conus archiepiscopus. *Con. testâ ovato-turbinatâ, ventricosâ, lævi; albâ, cæruleo et violaceo tinctâ, maculis aurantiis subsparsis trifasciatim cinctâ, lineisque aurantio-fuscis ubique subtilissimè undato-reticulatâ; spirâ obtuso-elatâ.*

The archbishop Cone. Shell ovately turbinated, ventricose, smooth; white, stained with light blue or violet, encircled with three bands of rather sprinkled orange spots, and everywhere very finely reticulated in a waved manner with orange-brown lines; spire obtusely raised.

Hwass, Enc. Méth. vers, vol. i. part 2. p. 747.

Lamarck, Anim. sans vert., vol. vii. p. 521.

Hab. —— ?

This very rare species is chiefly distinguished by the light waved character of the net-work, which is also remarkably fine and close, and variously stained with pale blue or violet.

Species 58. (Fig. *b*, Mus. Stainforth.)

(Second notice.)

Conus varius. Variety β.

Testa albicante-roseo tincta, supernè obesior; maculis grandibus fuscis perpaucis, distantibus, interdum obsoletis.

Shell tinged with pale rose-colour, stouter at the upper part; large brown spots very few, distant, sometimes obsolete.

Conus pulchellus, Sowerby (not of Swainson). Pro. Zool. Soc., 1834; Conch. Illus., f. 61.

Conus interruptus, Wood. Ind. Test. Supp.

Hab. Gallapagos Islands (found in the clefts of rocks at low water); Cuming.

This shell is unquestionably a variety of the *Conus varius* described at Plate XIII.

226

225ª

225ᵇ

226

227ª

225ᶜ

227ᵇ

171ª

171ᵇ

228

Sowerby del. et lith.

Arel. lith. Linn. imp.

CONUS.

PLATE XLII.

Species 224. (Mus. Belcher.)

CONUS CALIFORNICUS. *Con. testâ abbreviato-turbinatâ, solidâ, basim versus striatâ, striis elevatis; parte supernâ albidâ, maculis perpaucis, fuscescentibus, obliquis, ornatâ, infra pallidè fuscescente, filis tenuissimis confertis cinctâ; spirâ obtuso-convexâ.*

THE CALIFORNIAN CONE. Shell shortly turbinated, solid, striated towards the base, striæ raised; upper part whitish, ornamented with a very few light brown spots, pale brown beneath, encircled with a number of very fine, close-set, thread-like lines; spire obtusely convex.

HINDS, Pro. Zool. Soc., 1844.

Hab. California.

This species is one of very simple character, quite distinct from any hitherto described.

Species 225. (Fig. *a*, *b* and *c*, Mus. Stainforth.)

CONUS STRAMINEUS. *Con. testâ oblongo-turbinatâ, subcylindraceâ, basim versus sulcatâ, sulcis subdistantibus, subtilissimè striato-cancellatis; albidâ, maculis quadrangularibus aurantio-fuscis, bifasciatim confusis, cinctâ; spirâ concavo-elatâ, spiraliter sulcatâ, apice mucronato.*

THE STRAW-COLOURED CONE. Shell oblong-turbinated, somewhat cylindrical, grooved towards the base, grooves rather distant, very finely cancellated with striæ; whitish, encircled with rows of square orange-brown spots, confused together so as to form two bands; spire concavely raised, spirally grooved, apex pointed.

LAMARCK, Anim. sans vert., vol. vii. p. 481.

Conus alveolus, Sowerby, Conch. Illus., f. 11.

Variety β. (Fig. *a*.)

Testa maculis longitudinaliter confluentibus.

Shell with the spots longitudinally flowing together.

Conus cinereus, var. Sowerby, Conch. Illus., f. 43.

Hab. Mollucca and Philippine Islands.

This is a shell of more solid growth than the *Conus cinereus*, but may be best distinguished by its different style of painting.

Species 226. (Mus. Stainforth.)

CONUS BŒTICUS. *Con. testâ turbinatâ, solidiusculâ, lævi, basim versus granulosâ; albâ, punctis maculisque grandibus, bœticis, vividè pictâ; spirâ subobtuso-convexâ, obsoletè coronatâ, spiraliter sulcatâ, sulcis striato-cancellatis.*

THE DARK BROWN CONE. Shell turbinated, rather solid, smooth, granulated towards the base; white, vividly painted with dark brown dots, and large blotches of the same colour; spire rather obtusely convex, obsoletely coronated, spirally grooved, grooves cancellated with striæ.

REEVE, Pro. Zool. Soc., 1843.

Hab. Philippine Islands; Cuming.

The *Conus bœticus* exhibits no other colour but that of the dots and blotches, which are of very dark chocolate-brown upon a white ground.

Species 227. (Mus. Cuming.)

CONUS EPISTOMIUM. *Con. testâ elongato-turbinatâ, rectâ, tenuiculâ, albâ, maculis aurantio-fuscis, peculiariter fluentibus, bifasciatim cinctâ, maculis albo subobsoletè transversim punctato-lineatis; spirâ depressiusculâ, fuscescente maculatâ.*

THE SPIGOT CONE. Shell elongately turbinated, straight, rather thin, white, encircled with two bands of peculiarly flowing orange-brown spots, spots crossed with faint white dotted lines; spire rather depressed, spotted with light brown.

REEVE, Pro. Zool. Soc., 1843.

Hab. Mauritius.

This shell is of a peculiarly straight form, and reminds one very forcibly of the spigot or faucet-stop of a barrel; the very faint white dotted transverse lines are exceedingly regular, and of quite a different character to those of the brocade species.

Species 228. (Mus. Cuming.)

CONUS COCCEUS. *Con. testâ turbinatâ, supernè obesiusculâ, subrotundatâ, transversim subtilissimè liratâ, interstitiis leviter pertusis; albâ, liris maculis parvis irregularibus, pallidè cocceis, eximiè tæniatis; spirâ obtuso-convexâ.*

The scarlet-spotted Cone. Shell turbinated, rather stout towards the upper part, a little rounded, transversely very finely ridged, interstices between the ridges slightly pricked; white, delicately filleted with small irregular pale scarlet spots; spire obtusely convex.

Reeve, Pro. Zool. Soc., 1843.

Hab. New Holland.

Mr. Cuming possesses three specimens of this delicately marked Cone, the entire surface of which is covered with faintly articulated fillets of white and scarlet.

Species 177. (Fig. *d* and *e*, Mus. Bates.)

(Second notice.)

Conus omaria, variety. *Testa vividè cærulea, aperturæ fauce roseo tincta.*

Shell deep blue, interior of the aperture stained with rose-colour.

I am much indebted to John Bates, Esq., of Cowes, for the loan of this beautiful shell; its colouring is of the most delicate and vivid description, and not at all exaggerated in the accompanying figure.

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CONUS.

PLATE XLIII.

Species 229. (Mus. Cuming.)

CONUS CLERII. *Con. testâ turbinatâ, supernè acutangulâ, tenuiculâ, per totam superficiem subtilissimè liratâ; albâ, strigis fuscescentibus, longitudinaliter undatis, subirregulariter variegatâ; spirâ depressiusculâ, leviter canaliculatâ, apice elato, mucronato.*

CLERY'S CONE. Shell turbinated, sharply angled round the upper part, rather thin, very finely ridged over the entire surface; white, somewhat irregularly variegated with longitudinally waved brownish streaks; spire rather depressed, slightly canaliculated, apex raised and pointed.

REEVE, Pro. Zool. Soc., 1843.

Hab. Cape St. Thomas, Brazils (found in sandy mud at the depth of thirty-five fathoms); Clery.

I have much pleasure in adopting the name of an intelligent French naval commander, to whom we are indebted for this, and many new and interesting species of shells.

Species 230. (Mus. Cuming.)

CONUS PIPERATUS. *Con. testâ subabbreviato-turbinatâ, basim versus sulcatâ; albâ, maculis fuscis parvis sparsis irregulariter ornatâ; spirâ convexâ, spiraliter striatâ, apice mucronato, elato; aperturæ fauce fuscescente tinctâ.*

THE PEPPERED CONE. Shell rather shortly turbinated, grooved towards the base; white, irregularly ornamented with small scattered spots; spire convex, spirally striated, apex raised and pointed; interior of the aperture stained with pale brown.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

The *Conus erythræensis* is perhaps the nearest allied species to this, well characterized by the stained interior, and the more dotted style of the external painting.

Species 231. (Mus. Grüner, Bremen.)

CONUS GRÜNERI. *Con. testâ turbinatâ, supernè lævi, infra transversim sulcatâ, sulcis prominentibus; albâ, maculis subquadratis rubris trifasciatim tæniatâ, intervallis punctis rubris minutissimis aspersis; spirâ depresso-planâ, spiraliter canaliculatâ, basi intus extusque nigricante-violaceo tinctâ.*

GRÜNER'S CONE. Shell turbinated, smooth round the upper part, grooved beneath, grooves prominent; white, filleted with three bands of nearly square red spots, the spaces between which are sprinkled with very fine dots of the same colour; spire depressly flat, spirally canaliculated; base stained with very dark violet within and without.

REEVE, Pro. Zool. Soc., 1843.

Hab. Island of Java.

This is a beautiful little species, very distinct from any hitherto described. At the request of Mr. Cuming I have named it after M. Grüner of Bremen, a very zealous collector, whom I thank most cordially, not only for the loan of the shell, but for setting an example which I trust continental amateurs will not fail to profit by.

There is another specimen of rather larger size, in the cabinet of Mr. J. E. Gray of the British Museum.

Species 232. (Mus. Cuming.)

CONUS EMARGINATUS. *Con. testâ subfusiformi-turbinatâ, lævi, ad basim leviter sulcatâ; albâ, strigis fuscis latiusculis undatis vividè variegatâ; spirâ elatâ, canaliculatâ, apice mucronato; labro arcuato, juxta spiram emarginato.*

THE EMARGINATED CONE. Shell somewhat fusiformly turbinated, smooth, slightly grooved at the base; white, vividly variegated with rather broad waved brown streaks; spire raised, canaliculated, apex pointed; lip curved, emarginated next the spire.

REEVE, Pro. Zool. Soc., 1843.

Conus arcuatus, Gray, Zool. Beechey, Voy., p. 119.

Hab. Pacific Ocean.

Having already figured the *Conus arcuatus* from a specimen of the best authority (see Plate XV.), the entire surface of which is transversely grooved, I introduce the shell represented in pl. 36 of the 'Zoology' of Beechey's Voyage under the above new title.

Species 233, *a*, *b*. (Mus. Adamson.)

CONUS SINDON. *Con. testâ subventricoso-turbinatâ, lævi-usculâ; albidâ, lineis rubido-fuscis subtilissimis densissimè bifasciatim decussatâ; spirâ subobtuso-convexâ, apice rosaceo.*

THE FINE CAMBRIC CONE. Shell somewhat ventricosely turbinated, nearly smooth; white, very thickly decussated with exceedingly fine reddish brown lines in such a manner as to form two broad transverse bands; spire rather obtusely convex, apex rose-tinted.

REEVE, Pro. Zool. Soc., 1843.

Hab. —— ?

This interesting shell, for the loan of which I am indebted to the zeal of Mr. Adamson of Newcastle, is very distinct from any hitherto described species. The painting viewed through an ordinary lens suggests the appearance of very fine lawn or cambric linen, and is of quite a novel character.

Species 193. (Mus. Cuming.)

CONUS ADANSONI. *Con. testâ abbreviato-turbinatâ, supernè obesâ, cærulescente-albâ, olivaceo-viridi marmoratâ, maculis niveis, lineisque punctato-interruptis cinctâ; spirâ convexâ, apice mucronato, rosaceo.*

ADANSON'S CONE. Shell shortly turbinated, stout round the upper part, bluish white, marbled with olive-green, encircled with snowy white flakes and numerous dot-interrupted lines; spire convex, apex pointed, rose-tinted.

LAMARCK, Anim. sans vert., vol. vii. p. 502.

Le chotin, Adanson.

Hab. Red Sea.

This shell, for another example of which see Pl. XXXVI. f. 190. *f*, is very closely allied to the *Conus magus*; its short stout growth is however somewhat peculiar.

Species 234. (Mus. Stainforth.)

CONUS LACTEUS. *Con. testâ turbinatâ, solidâ, inflatâ, undique sulcatâ, sulcis subdistantibus, subtilissimè striato-cancellatis; eburneâ, nitente; spirâ subdepresso-convexâ, spiraliter striatâ, apice elato; aperturâ latiusculâ, fauce aurantio tinctâ.*

THE MILK-WHITE CONE. Shell turbinated, solid, inflated, grooved over its entire surface, grooves rather distant, very finely cancellated with striæ; ivory-white, shining; spire rather depressly convex, spirally striated, apex raised; aperture rather broad, interior stained with orange.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

Care should be taken not to confound this delicate shell with the *Conus columba*, which is of smaller size, and not grooved throughout.

Species 235. (Mus. Stainforth.)

CONUS PARIUS. *Con. testâ turbinatâ, solidâ, supernè obesâ, basim versus sulcatâ, sulcis distantibus latiusculis, densissimè striato-cancellatis; marmoreo-albâ; spirâ plano-convexâ, lævi, apice mucronato, fuscescente.*

THE PARIAN CONE. Shell turbinated, solid, stout round the upper part, grooved towards the base, grooves distant, rather broad, very thickly cancellated with striæ; marble-white; spire flatly conxex, smooth, apex pointed, tinged with brown.

REEVE, Pro. Zool. Soc., 1843.

Conus spectrum album, Chemnitz, Conch. Cab., vol. x. pl. 140. f. 1304.

Conus columba, var. c, Lamarck, Enc. Méth., pl. 331. f. 3.

Hab. —— ?

This shell, which is of a solid, shining white, (like the celebrated marble of Paros,) has been evidently confounded with the *Conus columba*; it requires however no very great exercise of critical discrimination to perceive that it differs materially both from that and the preceding species.

Species 236. (Mus. Stainforth.)

CONUS TINIANUS. *Con. testâ turbinatâ, tenui, ventricosâ, basim versus striatâ; cinnabarinâ, maculis pallidè cæsiis nebulatâ, tæniis indistinctis minio alboque articulatis irregulariter ornatâ; spirâ obtuso-convexâ, apice rosaceo.*

THE TINIAN CONE. Shell turbinated, thin, ventricose, striated towards the base; cinnabar or dull red lead-colour clouded with pale greyish blue spots, and irregularly ornamented with indistinct fillets of articulated white and dull cinnabar; spire obtusely convex, apex rose-tinted.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 713.

LAMARCK, Anim. sans vert., vol. vii. p. 502.

Hab. Island of Tinian, Ladrones.

This is a light rudely formed shell, exhibiting a delicate and very pretty style of painting. The *Conus aurora* (Species 62. Pl. XII.) runs so closely into the *Conus Tinianus*, that it might perhaps, with more propriety, be regarded as a variety of it.

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Sowerby. del. et lith.

prel. lith. Linn. imp.

CONUS.

PLATE XLIV.

Species 237. (Mus. Cuming.)

CONUS MADURENSIS. *Con. testâ turbinatâ, lævi, fulvâ aut viridescente, in medio albibalteatâ; balteâ fuscescente-punctatâ, zonis suprà et infrà albo fulvoque nubeculatis, perpaucis, irregularibus, lineisque fuscescentibus numerosis cinctâ; spirâ elatâ, apice mucronato.*

THE MADURA CONE. Shell turbinated, smooth, yellowish or greenish, white-belted round the middle; belt dotted with light brown, encircled above and below with a very few irregular zones of clouded yellowish brown and white, and a number of light brown lines; spire raised, apex pointed.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 709.

LAMARCK, Anim. sans vert., vol. vii. p. 500.

Hab. Island of Madura, north-east of the island of Java.

This appears to be a shell of rather doubtful character, and one of very rare occurrence.

Species 238. (Mus. Cuming.)

CONUS EXARATUS. *Con. testâ turbinatâ, subangustâ, per totam superficiem sulcatâ, sulcis regularibus, latiusculis, interstitiis subtilissimè striato-cancellatis; pallidè cæruleo-purpureâ, maculis ferruginosis albinubeculatis, perpaucis, parcis, sparsim ornatâ; spirâ acuminatâ.*

THE PLOUGHED CONE. Shell turbinated, rather narrow, grooved throughout its entire surface, grooves regular, rather broad, interstices very finely cancellated with striæ; pale bluish purple, ornamented with a few very small, scattered, rusty, white-clouded spots; spire acuminated.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

This is a very distinct species, remarkable for the regularity with which it is grooved.

Species 239. (Mus. Cuming.)

CONUS USTULATUS. *Con. testâ subelongato-turbinatâ, supernè tumidiusculâ, margine rotundatâ, transversim subtilissimè liratâ; pallidè ustulato-rubidâ, balteâ albidâ angustâ in medio cinctâ; spirâ convexâ, spiraliter striatâ, maculis perpaucis sparsis purpureo-rubris ad marginem superiorem ornatâ; apice mucronato.*

THE SCORCHED CONE. Shell rather elongately turbinated, a little swollen round the upper part, edge rounded, transversely very finely ridged; pale burnt red, encircled round the middle with a narrow white belt; spire convex, spirally striated, ornamented with a few scattered purple-red spots upon the upper edge of each whorl; apex pointed.

REEVE, Pro. Zool. Soc., 1843.

Hab. New Holland.

There is no trace of any purple-red spots or other dark character on the body of the shell.

Species 240. (*Fig. a*, Mus. Belcher; Fig. *b*, Mus. Stainforth.)

CONUS ACULEIFORMIS. *Con. testâ elongato-turbinatâ, subfusiformi, undiquè sulcatâ, sulcis subtilissimè striato, cancellatis, nunc angustis, liris intermediis planis latiusculis, nunc latioribus, liris intermediis rotundatis angustis; albidâ, fuscescente punctatâ, maculis fuscescentibus biseriatim cinctâ; spirâ acuminatâ, apice elato, acuto.*

THE PRICKLE-SHAPED CONE. Shell elongately turbinated, somewhat fusiform, grooved throughout, grooves very finely cancellated with striæ, sometimes narrow with the intermediate ridges flat and rather broad, sometimes broad with the intermediate ridges rounded and narrow; whitish, dotted with light brown, encircled with two rows of light brown spots; spire acuminated, apex raised, sharp.

REEVE, Pro. Zool. Soc., 1843.

Hab. Cagayan, island of Mindanao, Philippines (dredged from sandy mud at the depth of from twenty-five to thirty fathoms); Cuming.

The specimens collected by Mr. Cuming at the above-mentioned island are mostly smaller than those here figured.

Species 241. (Mus. Cuming.)

CONUS VIOLACEUS. *Con. testâ elongato-turbinatâ, cylindraceâ, tenui, nitidâ; violaceâ, transversim obsoletè fuscescente punctato-lineatâ, fuscescente longitudinaliter strigatâ, aut sparsim maculatâ; strigis subdi-*

stantibus, lineis brevibus fuscescentibus, exiliter albi-articulatis, ornatis; spirâ rotundato-obtusâ, spiraliter striatâ.

THE VIOLET-STAINED CONE. Shell elongately turbinated, cylindrical, thin, bright; violet-stained, encircled with obsolete lines of light brown dots, longitudinally streaked with light brown; streaks rather distant, crossed with short brown lines, faintly articulated with white; spire rotundately obtuse, spirally striated.

REEVE, Pro. Zool. Soc., 1843.

Hab. Matnog, island of Luzon, Philippines (found on the reefs); Cuming.

This is a very interesting species; the faint dotted lines with which the entire shell is encircled are scarcely visible on the violet ground without the assistance of an ordinary lens, but in passing over the longitudinal streaks of light brown they present a more decided appearance.

Species 242. (Mus. Grüner, Bremen.)

CONUS CONCOLOR. *Con. testâ subpyriformi-turbinatâ, basim versus subtiliter liratâ; cinnamomeo-fuscâ, lineis fuscis irregularibus, nunc confertis, nunc distantioribus, cinctâ; spirâ convexâ, spiraliter sulcatâ; suturis rudibus, apice elato.*

THE UNIFORM CONE. Shell somewhat pyriformly turbinated, finely ridged towards the base; cinnamon-brown, encircled with irregular brown lines, sometimes close-set, sometimes more distant from each other; spire convex, spirally grooved; sutures rugged and uneven, apex raised.

SOWERBY, Conch. Illus., f. 59.

Hab. China.

This species, of which I have seen one or two other specimens, is of an uniform cinnamon-brown colour; and the spire is well characterized by the rugged uneven condition of the sutures.

Species 243. (Mus. Stainforth.)

CONUS TABIDUS. *Con. testâ turbinatâ, leviter pyriformi, tenui, undique sulcatâ, sulcis basalibus latioribus, profundis, alteris irregularibus, subtilissimis, undulatis; albâ, totâ superficie striis longitudinalibus elevatis peculiariter sculptâ; spirâ subobtuso-convexâ, obsoletè coronatâ.*

THE CONSUMPTIVE CONE. Shell turbinated, slightly pyriform, thin, everywhere grooved, basal grooves wider and rather deep, the others irregular, very fine, waved; white, entire surface peculiarly sculptured with longitudinal striæ; spire rather obtusely convex, obsoletely coronated.

REEVE, Pro. Zool. Soc., 1843.

Hab. —— ?

I am not aware that the raised longitudinal striæ with which this shell is so delicately sculptured are to be found in any other species of the genus.

Species 244. (Mus. Stainforth.)

CONUS AMBIGUUS. *Con. testâ turbinatâ, lævi, basim versus liratâ, lineis subtilissimis, undatis, longitudinalibus, subobsoletè incisis; albâ, pallidè fuscescente tinctâ; spirâ obtuso-convexâ, leviter canaliculatâ, maculis arcuatis fuscescentibus ornatâ, apice mucronato, elato.*

THE DOUBTFUL CONE. Shell turbinated, smooth, ridged towards the base, rather obsoletely engraved with very fine, festooned, longitudinal lines; white, palely stained with light brown; spire obtusely convex, slightly canaliculated, ornamented with arched brownish spots; apex raised and pointed.

REEVE, Pro. Zool. Soc., 1843.

Hab. —— ?

There is always a doubtful character about shells exhibiting faint indications of colour; I have not, however, succeeded in referring this to any species hitherto described.

Species 245. (Mus. Cuming.)

CONUS LENTIGINOSUS. *Con. testâ fusiformi-turbinatâ, tenuiculâ, lævi, basim versus sulcatâ, sulcis latiusculis, profundis; albidâ, fuscescente lentiginosâ et punctatâ; spirâ elatâ, anfractibus acutangulis, marginibus fuscescente maculatâ, maculis subdistantibus; labro subexpanso, juxta spiram emarginato.*

THE FRECKLED CONE. Shell fusiformly turbinated, rather thin, smooth, grooved towards the base, grooves rather broad and deep; whitish, freckled and dotted with light brown; spire raised, whorls sharp-angled, edges spotted with brown, spots rather distant; lip slightly expanded, emarginated next the spire.

REEVE, Pro. Zool. Soc., 1843.

Hab. —— ?

This is an interesting and important species, of which there is a fainter specimen, of more elongated growth, in the collection of Mr. Adamson of Newcastle.

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249c

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LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

Sowerby, del. et lith.

prel. lith. Lin

CONUS.

PLATE XLV.

Species 246. (Mus. Gray.)

CONUS TROCHULUS. *Con. testâ abbreviato-turbinatâ, obesâ, solidâ, lævigatâ, basim versus sulcatâ; albâ, aperturæ fauce rubido-violaceo tinctâ; spirâ obtuso-convexâ, lævigatâ.*

THE LITTLE TOP CONE. Shell shortly turbinated, stout, solid, smooth, grooved towards the base; white, interior of the aperture stained with reddish violet; spire obtusely convex, smooth.

REEVE, Pro. Zool. Soc., 1843.

Hab. —— ?

This species, of which there are several examples in the British Museum, all with the violet-tinged aperture, exhibits the same contrast of colour as a very peculiar white variety of the *Conus nivosus*.

Species 247. (Mus. Stainforth.)

CONUS SUGILLATUS. *Con. testâ turbinatâ, solidiusculâ, lævigatâ, basim versus subobsoletè noduloso-liratâ; albidâ, fasciis duabus latissimis livido-olivaceis, lineisque exilibus fuscescente-punctatis, cinctâ; spirâ plano-convexâ, canaliculatâ, apice mucronato, elato, anfractuum marginibus subtilissimè obliquè nodulosis; basi et aperturæ fauce violaceo tinctâ.*

THE BRUISED CONE. Shell turbinated, rather solid, smooth, somewhat obsoletely nodulously ridged towards the base; whitish, encircled with two very broad, livid olive bands, and a number of faint brown-dotted lines; spire flatly convex, canaliculated, apex raised, pointed, edges of the whorls very finely obliquely noduled; base and interior of the aperture stained with violet.

REEVE, Pro. Zool. Soc., 1843.

Hab. —— ?

This shell may probably have been confounded with the *Conus lividus*; it is, however, quite distinct from that species both in the detail of the painting and in the structure of the spire. The spire is canaliculated, and very peculiarly beaded with fine oblique nodules, the canaliculated surface being of an olive-brown colour, whilst the nodules are white.

Species 248. (Mus. Stainforth.)

CONUS STRIGATUS. *Con. testâ elongato-turbinatâ, subcylindraceâ; albidâ, strigis cinnamomeo-fuscis, confertis, interruptis, undique cinctâ, maculisque oblongis pallidè variegatâ; spirâ convexo-elatâ.*

THE STRIPED CONE. Shell elongately turbinated, somewhat cylindrical, whitish, encircled throughout with a number of interrupted, close-set, cinnamon-brown stripes, and palely variegated with oblong blotches of the same colour; spire convexly raised.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 733.

LAMARCK, Anim. sans vert., vol. vii. p. 516.

Hab. —— ?

This is a species of rather doubtful character, and I am not sure that the specimen here figured from the collection of the Rev. Mr. Stainforth is really the shell intended. I venture to publish it as such because it agrees, as far as its condition allows, with the minute description of the *Conus strigatus* given by Bruguière in the 'Encyclopédie Méthodique'; and it appears moreover perfectly distinct from any other species of the genus.

Species 249. (Fig. *a*, Mus. Gray; Fig. *b*, Mus. Stainforth; Fig. *c*, Mus. Brit.)

CONUS MUTABILIS. *Con. testâ turbinatâ, subpyriformi, lævigatâ, basim versus undulatim sulcatâ; fuscescente, in medio sæpè pallidissimâ, fusco irregulariter virgatâ, lineisque fuscis interruptis cinctâ; spirâ convexâ, spiraliter striatâ, suturis rudibus, apice elato.*

THE CHANGEABLE CONE. Shell turbinated, somewhat pear-shaped, smooth, grooved in a waved manner towards the base; light brown, often very pale in the middle, irregularly streaked with brown, and encircled with interrupted brown lines; spire convex, spirally striated, sutures rugged and uneven, apex raised.

CHEMNITZ, Conch. Cab., vol. xi. p. 52. pl. 182. f. 1758 and 1759.

Hab. —— ?

In my observations on the *Conus vexillum* (Plate I. Species 3.), it is related how Lamarck quotes as a variety of that species a shell figured by Chemnitz under the title of *Conus mutabilis*. These remarks were offered

under an apprehension that the figure alluded to could not strictly be referred to the *Conus vexillum*, and conclude thus:—"It is, however, exceedingly difficult to say what species that figure is intended to represent." I have now completely identified the *Conus mutabilis* of the 'Conchylien Cabinet' as a very distinct species, and have the pleasure of representing specimens of different varieties from the collections of Mr. Stainforth, Mr. Gray, and the British Museum.

Species 250. (Mus. Cuming.)

CONUS SUTURATUS. *Con. testâ subabbreviato-turbinatâ, solidiusculâ, lævigatâ, basim versus sulcatâ, sulcis latiusculis, distantibus; albâ, basi pallidè rosaceâ; spirâ plano-convexâ, profundè suturatâ, spiraliter liratâ et striatâ, apice minuto, acuto.*

THE SUTURED CONE. Shell rather shortly turbinated, somewhat solid, smooth, grooved towards the base, grooves rather broad, distant; white, stained with pale rose at the base; spire flatly convex, deeply sutured, spirally ridged and striated, apex very small, raised.

REEVE, Pro. Zool. Soc., 1844.

Hab. ——?

There is a very peculiar character on the spire of this shell; the sutures have an unusually decided appearance, in consequence of a small ridge which each whorl throws up at its junction with the preceding.

Species 251. (Mus. Adamson.)

CONUS CREPUSCULUM. *Con. testâ turbinatâ, tenuiculâ, supernè lævi, infrà exiliter granulatâ, granulis seriatim digestis, basim versus gradatim majoribus; luteolâ, basi violaceâ; spirâ convexâ, apice mucronato, elato, anfractuum marginibus subtilissimè obsoletè nodulosis.*

THE TWILIGHT CONE. Shell turbinated, rather thin, smooth at the upper part, faintly granulated beneath, granules set in rows, increasing gradually in size towards the base; pale yellow, base violet; spire convex, apex pointed, raised, edge of the whorls very finely obsoletely noduled.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

This shell is allied in some measure to the *Conus lividus*; it is, however, of much lighter growth, there is no indication of any colour in the aperture, and the spire is obsoletely very finely beaded.

Species 252. (Mus. Stainforth.)

CONUS TRISTIS. *Con. testâ turbinatâ, subfusiformi, lævigatâ, basim versus sulcatâ; albâ; spirâ convexo-elatâ, spiraliter striatâ, anfractuum marginibus subtilissimè nodulosis, anfractûs ultimi nodulis obsoletis, apice mucronato.*

THE SAD-LOOKING CONE. Shell turbinated, slightly fusiform, smooth, grooved towards the base; white; spire concavely raised, spirally striated, edges of the whorls very finely nodulous, nodules of the last whorl obsolete, apex pointed.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

There is no indication of any colour in this shell; it is of rather light structure.

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254b

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256a

256b

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258a

258b

258c

CONUS.

PLATE XLVI.

Species 253. (Mus. Stainforth.)

CONUS PLUMBEUS. *Con. testâ turbinatâ, subpyriformi, irregulariter rugulosâ et granosâ, cæruleo-albâ, olivaceo- aut violaceo-plumbeo fasciatâ et strigatâ; spirâ convexâ, nodulis subtilibus coronatâ, albâ, apice obtuso, rosaceo; basi et aperturæ fauce vividè violaceâ.*

THE LEADEN CONE. Shell turbinated, somewhat pyriform, irregularly wrinkled and granulated; bluish white, banded and streaked with olive or violet lead-colour; spire convex, coronated with fine nodules, white, apex obtuse, rose-tinted; base and interior of the aperture vividly stained with violet.

REEVE, Pro. Zool. Soc., 1843.

Hab. —— ?

The wrinkles and irregular granules which cover the greater portion of this specimen may not belong to the species, which is introduced upon independent grounds; namely, on account of the cross-blotched style of painting characteristically exhibited on the under side of the shell, the deep violet lining of the aperture, and the rose-tinted apex upon a neatly coronated white spire.

Species 254. (Fig. *a* and *b*, Mus. Brit.)

CONUS BRODERIPII. *Con. testâ tenuiculâ, subinflatâ, transversim sulcatâ, sulcis basim versus distinctioribus, subtilissimè pertusis; pallidissimè incarnato-albâ, maculis aurantio-fuscescentibus inter sulcos ornatâ; spirâ planiusculâ, spiraliter sulcatâ, apice elato, mucronato; basi et aperturæ fauce pallidè incarnato-rosea.*

BRODERIP'S CONE. Shell rather thin, a little inflated, transversely grooved, grooves more distinct towards the base, very finely pricked; very pale fleshy-white, ornamented between the grooves with blotches of light orange-brown; spire rather flat, spirally grooved, apex raised, pointed; base and interior of the aperture pale fleshy rose-tinted.

REEVE, Pro. Zool. Soc., 1843.

Hab. —— ?

I have much pleasure in dedicating this very chaste and beautiful species to W. J. Broderip, Esq., F.R.S., a gentleman well known in the conchological world, to whose zeal the country is much indebted for this and many other valuable shells which adorn our national collection.

Species 255. (Mus. Brit.)

CONUS LAUTUS. *Con. testâ turbinatâ, tenuiculâ, lævigatâ; luteâ, punctis grandibus fuscis, trifasciatim confusis, seriatim cinctâ; spirâ obtuso-convexâ, strigis fuscis arcuatis ornatâ.*

THE GAUDY CONE. Shell turbinated, rather thin, smooth; bright yellow, encircled with rows of large brown spots, confused together at the base, near the spire, and about the middle, in the form of bands; spire obtusely convex, ornamented with curved brown streaks.

REEVE, Pro. Zool. Soc., 1843.

Hab. —— ?

I am unable to connect this with any hitherto described species; it exhibits a bright display of colour, and must be a striking shell in finer condition.

Species 256. (Mus. Brit.)

CONUS ÆMULUS. *Con. testâ turbinatâ, supernè tumidiusculâ, lævigatâ, olivaceo-cæruleâ, olivaceo-fusco variegatâ, tæniatâ, et maculatâ; spirâ subobtuso-elatâ, suturis rudibus; aperturæ fauce olivaceo-fusco tinctâ.*

THE RIVAL CONE. Shell turbinated, rather swollen at the upper part, smooth; olive-blue, variegated, filleted, and spotted with olive-brown; spire rather obtusely raised, sutures slightly rugged and uneven; interior of the aperture stained with dark olive-brown.

REEVE, Pro. Zool. Soc., 1843.

Hab. —— ?

This is another very richly coloured shell allied in some measure to the *Conus Guinaicus*, but presenting a very different style of painting.

Species 257. (Mus. Brit.)

CONUS PASTINACA. *Con. testâ oblongo-turbinatâ, transversim striatâ, striis elevatis, basim versus prominentioribus; albâ, interdum pallidè luteolâ, immaculatâ; spirâ obtuso-convexâ, lævigatâ.*

THE PARSNIP CONE. Shell oblong-turbinated, trans-

versely striated, striæ raised, becoming more prominent towards the base; white, sometimes very pale yellow, unspotted; spire obtusely convex, smooth.

LAMARCK, Anim. sans vert., vol. vii. p. 469.

Hab. —— ?

This appears to be a shell of very rare occurrence; I have not seen it in any private cabinet.

Species 258. (Fig. *a*, *b* and *c*, Mus. Brit.)

CONUS GRAYI. *Con. testâ turbinatâ, supernè obesâ, subpyriformi, solidâ, lævigatâ, basim versus liratâ; cæsiâ, aut cinereo-cæruleâ, maculis grandibus nigricantibus, undatis, sæpissimè bifasciatim digestis, ornatâ; spirâ convexâ, apice mucronato.*

GRAY'S CONE. Shell turbinated, stout at the upper part, somewhat pear-shaped, solid, smooth, finely ridged towards the base; grey or ashy blue, ornamented with large waved blackish spots, generally arranged so as to form two bands; spire convex, apex pointed.

REEVE, Pro. Zool. Soc., 1843.

Hab. —— ?

As our national Museum is indebted to Mr. Gray for this very interesting new species, I have much pleasure in naming it after him.

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CONUS.

PLATE XLVII.

Species 259. (Mus. Brit.)

CONUS MINUTUS. *Con. testâ oblongo-turbinatâ, pyramidali, lævigatâ; incarnatâ, fasciis duabus rubidis latissimis cinctâ; spirâ elatâ, anfractuum marginibus rubido-fusco maculatis.*

THE MINUTE CONE. Shell oblong-turbinated, pyramidal, smooth; flesh-colour, encircled with two very broad bands of reddish brown; spire raised, edges of the whorls spotted with reddish brown.

REEVE, Pro. Zool. Soc., 1843.

Hab. Island of St. Vincent, West Indies; Guilding.

This is the smallest species of the genus, and quite peculiar in its characters.

Species 260. (Mus. Stainforth.)

CONUS PYGMÆUS. *Con. testâ subabbreviato-turbinatâ, lævi, infernè sulcatâ, sulcis prominentibus, subdistantibus; pallidè violaceo-albâ, strigis fuscis longitudinalibus, latis, undatis, punctorumque seriebus transversis ornatâ; spirâ quasi gradatim elatâ, lævi; aperturæ fauce rubido-violaceâ.*

THE PYGMY CONE. Shell rather shortly turbinated, smooth, grooved at the lower part, grooves prominent and rather distant; pale violet-tinged white, ornamented with broad waved longitudinal brown streaks, and transverse rows of rather distant irregular dots; spire raised with steps, as it were, smooth; interior of the aperture stained with reddish violet.

REEVE, Pro. Zool. Soc., 1843.

Hab. —— ?

The dark zigzag streaks in this little shell pass over the edges of the whorls, leaving their ends visible on the spire.

Species 261. (Mus. Cuming.)

CONUS PUNCTURATUS. *Con. testâ abbreviato-turbinatâ; totâ superficie lineis elevatis longitudinalibus et transversis clathratâ, interstitiis quasi puncturatis; pallidè cinereâ; spirâ obtuso-convexâ, spiraliter striatâ, obsoletè coronatâ, fusco maculatâ, apice rosaceo.*

THE PUNCTURED CONE. Shell shortly turbinated; entire surface latticed with transverse and longitudinal raised lines, interstices looking as if punctured; pale ash-colour; spire obtusely convex, spirally striated, obsoletely coronated, spotted with brown, apex rose-tinted.

HWASS, Enc. Méth. vers, vol. i. part 2. p. 635.

Hab. Botany Bay, New Holland; Hwass.

This is the only species of the genus, and it is consequently an important one, in which the entire surface of the shell is absolutely latticed with equidistant, transverse and longitudinal raised lines or ridges. It appears to have escaped the notice of Lamarck.

Species 262. (Mus. Grüner, Bremen.)

CONUS CONSPERSUS. *Con. testâ turbinatâ, leviter inflatâ, lævi, basim versus sulcatâ; pallidè luteolâ, maculis aurantio-fuscis variisque irregulariter conspersis, lineis, capillaribus confertis, undique cinctâ; spirâ convexâ, aurantio-fusco maculatâ.*

THE SPRINKLED CONE. Shell turbinated, slightly inflated, smooth, grooved towards the base; pale yellowish, sprinkled with irregular, variously-shaped orange-brown spots, and everywhere encircled with extremely fine, close-set, hair-like lines; spire convex, spotted with orange-brown.

REEVE, Pro. Zool. Soc., 1843.

Hab. —— ?

This species may be recognised by the fine hair lines with which its entire surface is ornamented.

Species 263. (Mus. Stainforth.)

CONUS ATTENUATUS. *Con. testâ gracilè turbinatâ, basim versus attenuatâ, lævi; luteâ vel aurantio-fuscescente, strigis albidis perpaucis latis undatis longitudinaliter ornatâ; spirâ depressâ, acutangulâ, aurantio-fuscescente alboque tessellatâ, apice acutissimo, elato.*

THE ATTENUATED CONE. Shell slenderly turbinated, attenuated towards the base, smooth, yellow or light orange-brown, longitudinally ornamented with a very few broad, waved, white stripes; spire depressed, sharp-angled, tessellated with light orange-brown, apex raised, very sharp-pointed.

REEVE, Pro. Zool. Soc., 1843.

Hab. —— ?

The long, slender, sugar-loaf form of this shell is rather peculiar, and it exhibits a style of painting which

I do not remember to have observed in varieties of any other species.

Species 264. (Mus. Brit.)

CONUS RUTILUS. *Con. testâ subpyriformi-turbinatâ, tenui, subinflatâ, striis tenuissimis subobsoletis, confertis, cinctâ; rutilâ, unicolore; spirâ depressiusculâ, versus apicem subtilissimè coronatâ, apice elato.*

THE FIERY RED CONE. Shell somewhat pyriformly turbinated, thin, rather inflated, encircled with very fine close-set, nearly obsolete striæ; uniform fiery red; spire rather depressed, very finely coronated towards the apex, apex raised.

MENKE, Moll. Nov. Holl., p. 27. no. 133.

Hab. North-west coast of New Holland; Menke.

I am much indebted to Professor Menke of Pyrmont, Germany, for sending me a drawing of this species; it has enabled me to identify a very interesting series of specimens in the collection of the British Museum, of which no information could be obtained. I have not observed the species in any private cabinet.

Species 265. (Mus. Stainforth.)

CONUS BUXEUS. *Con. testâ elongato-turbinatâ, subcylindraceâ, lævi, basim versus subtiliter liratâ; luteo-fuscescente, filis fusco-punctatis numerosis, confertis, cinctâ; spirâ elatâ, anfractuum marginibus subtilissimè nodulosis, apice mucronato.*

THE BOX-WOOD CONE. Shell elongately turbinated, somewhat cylindrical, smooth, finely ridged towards the base; yellowish brown, everywhere encircled with numerous close-set, brown-dotted, thread-like lines; spire raised, edges of the whorls very finely beaded, apex pointed.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

The *Conus buxeus* is very closely allied to the *Conus lignarius*; it differs chiefly in being of a more elongated or fusiform shape, whilst the spire is distinctly beaded and not canaliculated.

Species 266. (Mus. Stainforth.)

CONUS NITIDUS. *Con. testâ turbinatâ, lævi, nitidâ, prope basim subtilissimè liratâ; aurantio-fuscescente, supernè et medianè exiliter albimaculatâ, lineis fuscis interruptis subdistantibus undique cinctâ; spirâ subelatâ, spiraliter striatâ, apice pallidè rosaceo.*

THE SHINING CONE. Shell turbinated, smooth, shining, very finely ridged near the base; light orange-brown, faintly spotted with white about the middle and upper part, and everywhere encircled with rather distant, interrupted brown lines; spire somewhat raised, spirally striated, apex tinged with pink.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

The lines which encircle the entire surface of this delicate little Cone are more particularly interrupted in passing over the faint spots round the middle and upper part of the shell. The pink apex is very characteristic.

Species 267. (Mus. Brit.)

CONUS CASTUS. *Con. testâ turbinatâ, subinflatâ, lævi; luteâ, lineis perpaucis exilibus, subtilissimè nigricante-punctatis, irregulariter distantibus, cinctâ; spirâ lævi, apice rosaceo.*

THE CHASTE CONE. Shell turbinated, a little inflated, smooth; yellow, encircled with a few faint, very finely black-dotted lines, at irregular distances; spire smooth, apex rose-tinted.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

This is another very chaste and characteristic species, very different from any hitherto described.

Species 268. (Mus. Stainforth.)

CONUS LIRATUS. *Con. testâ subabbreviato-turbinatâ, liris subprominulis undique circumdatâ; albidâ, maculis paucis aurantio-fuscis longitudinaliter confluentibus biseriatim cinctâ; spirâ exsertâ, noduliferâ, apice pallidè rosaceo; basi et aperturæ fauce vividè violaceo-rosea.*

THE RIDGED CONE. Shell rather shortly turbinated, everywhere surrounded by rather prominent ridges; whitish, encircled with a few orange-brown spots, flowing down longitudinally and ranging in two rows; spire exserted, coronated with nodules, apex tinged with pink; base and interior of the aperture vividly stained with violet-rose.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

A very curious well-marked species, in excellent condition, which, I believe, is at present unique in the unrivalled Cone-collection of the Rev. F. J. Stainforth, to which, together with that of H. Cuming, Esq., this monograph is mainly indebted for its completeness.

212. b.

269.

212. c.

270.

228. b.

271.

272.

Sowerby, del et lith.

Reeve, Benham & Reeve, imp

CONUS.

Supp. PLATE I.

Species 269. (Mus. Cuming.)

CONUS SIEBOLDII. *Con. testâ fusiformi-conicâ, basi gradatim attenuatâ et spiraliter sulcatâ, supernè lævi, spirâ acutissimè acuminatâ, suturis peculiariter excavato-canaliculatis; albâ, maculis perpaucis aurantio-fuscis medio cingulatâ.*

SIEBOLD'S CONE. Shell fusiformly conical, gradually attenuated towards the base and spirally grooved, smooth towards the upper part; spire very sharply acuminated, sutures peculiarly excavately channelled; white, encircled round the middle with a few orange-brown blotches.

Hab. Japan; Dr. Siebold.

This shell is not only distinct in form from any of those which have preceded it, but has a somewhat remarkable spire; the sutures being broadly excavated, the edge of the whorls is sharply elevated forming a ridge, which is developed with the same regularity to the apex.

Species 212. (Fig. *b* and *c*, Mus. Cuming.)

CONUS PORTO-RICANUS. When engaged on this species about four years since (Pl. XXXIX.) with the only specimen then known in this country, I was fearful from its worn and discoloured condition that it might prove to be no other than a variety of *C. achatinus*. Since that period a beautifully granulated example (Fig. *b*.) has come into the possession of Mr. Cuming without any information as to its locality, whilst another (Fig. *c*.) has passed into the same valuable repository, collected by Mr. Dyson at Cumana, Venezuela. The latter of these is entirely free from granules, yet possessing all the characteristics of form and colouring equally peculiar to both, and they serve to establish the species in a very satisfactory manner, as one beyond all doubt.

Species 270. (Mus. Cuming.)

CONUS TELATUS. *Con. testâ oblongo-conicâ, subpyramidali, lævi, basin versus striatâ, spirâ concavo-acuminatâ; albâ, reticulâ aurantio-fuscâ ubique notatâ, maculis grandibus aureo-luteis, longitudinaliter lineis nigris undatis, bifasciatim cinctâ.*

THE WEBBED CONE. Shell oblong-conical, somewhat pyramidal, smooth, striated towards the base, spire concavely acuminated; white, marked throughout with a fine orange-brown net-work, encircled with two bands of large golden-yellow blotches, marked with longitudinally waved black lines.

Hab. —— ?

M. Deshayes first pointed out to Mr. Cuming the circumstance of this shell constituting a species distinct from *C. textile* or *vicarius*; it is of a more straight pyramidal growth with the net-work pattern of finer texture, and however minute may be the distinction, the species carries a certain identity with it by which it may always be recognised.

Species 228 *b*. (Mus. Saul.)

CONUS COCCEUS. This magnificent example of the *C. cocceus*, from the collection of Miss Saul, is worthy of being figured as adding a value to the species, which I scarcely anticipated at the time of its introduction in January, 1844 (Pl. XLII). It is a shell of solid growth and of a uniform deep pinkish scarlet, faintly articulated with white, to which the accompanying figure hardly does justice. M. Kiener has just figured it as a new species with the name *C. citrinus*, Icon. coq. viv. *Conus*, Pl. 59. f. 6.

Species 271. (Mus. Cuming.)

CONUS FULGURANS. *Con. testâ ovato-conicâ, solidiusculâ, supernè obesâ, lævigatâ, basi sulcatâ, spirâ excavato-canaliculatâ; albâ, maculis longitudinaliter flexuosis guttisque ferrugineis transversis pictâ.*

THE LIGHTNING-MARKED CONE. Shell ovately conical, rather solid, stout round the upper part, smooth, grooved at the base, spire excavately channelled; white, painted with rust brown flexuous longitudinal blotches and transverse dots.

HWASS, Enc. Méth. vers. v. i. part 2. p. 687. Lamarck, Anim. sans vert. (Deshayes' edit.) v. xi. p. 74.

Hab. —— ?

In this species, of which Mr. Cuming has obtained two specimens without any information as to their locality, we may fairly recognize the *C. fulgurans* described in the Encyclopédie Méthodique, in 1792, by Bruguière, from the manuscript of M. Hwass of Copenhagen. Lamarck

published the species in his 'Animaux sans vertébres' and referred to the figure which accompanied it in the Encyclopédie Méthodique (re-produced by Kiener in his monograph of the genus lately issued), but the shell was unknown to him, and it has not been identified until now. The figure in Martini which is referred to both by Bruguière and Lamarck in illustration of this species, does not agree with the more authentic one in the Encyclopédie Méthodique, and Gmelin's name *C. fulmineus*, founded on the former without a knowledge of the shell, may therefore remain in obscurity.

Species 272. (Mus. Cuming.)

CONUS PYRAMIDALIS. *Con. testâ subelongato-conicâ, lævigatâ, basi subtiliter striatâ; cæruleo et incarnato tinctâ, reticulâ purpureo-fuscâ, lineis longitudinaliter inclinatis pictâ, maculis rufescente-aurantiis perpaucis bifasciatim cinctâ.*

THE PYRAMIDAL CONE. Shell somewhat elongately conical, smooth, finely striated at the base; stained blue and flesh-colour, painted with a purple-brown net-work, the lines being inclined longitudinally, and encircled with two bands of reddish orange spots, very few in number.

LAMARCK, Anim. sans vert. (Deshayes' edit.) v. xi. p. 125.

Hab. —— ?

This is certainly distinct from the *C. canonicus* to which it bears considerable resemblance, and has been received by Mr. Cuming from good authority at Paris as identical with Lamarck's *C. pyramidalis*, of which an apparently acuminately distorted example is figured in the Encyclopédie Méthodique.

273.

274. a.

274. b.

198. b.

275.

276.

277.

278.

279.

280.

Sowerby del. et lith.

Reeve, Benham, & Reeve, imp.

CONUS.

Supp. PLATE II.

Species 273. (Mus. Cuming.)

CONUS RUPPELLII. *Con. testâ ovato-conicâ, basi granato-striatâ, spirâ depressiusculâ, sulcatâ et obsoletè coronatâ; rufo-fuscescente, lineis castaneis, hic illic punctiferis cingulatâ, fasciâ punctatâ in medio, spiræ nodulis albis, interstitiis castaneis.*

RUPPELL'S CONE. Shell ovately conical, granosely striated at the base, spire rather depressed, grooved and obsoletely coronated; reddish brown, encircled with lines which are here and there resolved into dots, a band of dots in the middle, nodules of the spire white, interstices chesnut.

Hab. Red Sea; Dr. Rüppell.

Of a rich deep brown colour, encircled with unsteady dot-lines.

Species 274. (Mus. Cuming.)

CONUS SPECIOSISSIMUS. *Con. testâ ovato-conicâ, lævi aut basin versus obscurè distanter liratâ, spirâ subobsoletè coronatâ; vividè coccineo-roseâ, fasciis duabus maculiferis roseo-albidis medio et supernè cingulatâ, spirâ marmoratâ.*

THE BEAUTIFUL CONE. Shell ovately conical, smooth or obscurely distantly ridged towards the base, spire somewhat obsoletely coronated; bright scarlet-pink, with two pink-white blotchy bands round the middle and upper parts, spire marbled with the same.

Hab. Curacoa.

A most delicately painted species, reminding one somewhat of the *C. cardinalis*.

Species 198. (Fig. *b*. Mus. Cuming.)

CONUS MILIARIS var. This shell deserves to be noticed as a very marked variety of a well-known species; M. Kiener describes it as a new one under the name *C. scaber*, but I think he errs in this respect.

Species 275. (Mus. Cuming.)

CONUS LARGILLIERTII. *Con. testâ pyramidali-ovatâ, solidiusculâ, spirâ acuminatâ, lævi; rufescente-fuscâ, medio albifasciatâ, tæniis angustis rufo-fusco alboque articulatis undique cingulatâ, spirâ subirregulariter tessellatâ.*

LARGILLIERT'S CONE. Shell pyramidally ovate, rather solid, spire acuminated, smooth; reddish-brown, white-banded in the middle, encircled throughout with narrow articulated fillets of red-brown and white, spire somewhat irregularly tessellated.

KIENER, Icon. coq. viv., pl. 98. f. 3.

Hab. ——?

The specific value of this shell must be estimated rather by its form than by the pattern or colouring, which is seen with trifling variation in the *C. trigonus*, *luctificus*, and *Ruppellii*.

Species 276. (Mus. Cuming.)

CONUS CONTUSUS. *Con. testâ subcylindraceo-ovatâ, tenuiculâ, lævigatâ, sulcis tribus quaternisve distantibus ad basin, spirâ subtiliter bisulcatis, suturis rudibus, apice valdè acutâ; livido-cæruleâ, aurantio tinctâ.*

THE BRUISED CONE. Shell somewhat cylindrically ovate, rather thin, smooth, with three or four distant grooves at the base, spire finely double-grooved, rude at the sutures, apex very sharp; livid-blue, stained with orange.

Hab. Moluccas.

Whether this species will be found to reveal any design in the colouring it is impossible to foresee from the accompanying specimen, which is of a peculiar livid ochraceous tint though very characteristic throughout.

Species 277. (Mus. Cuming.)

CONUS PRÆTEXTUS. *Con. testâ obeso-ovatâ, basin versus sulcatâ, supra sulcis distantioribus punctatis cingulatâ, spirâ depressâ, sulcatâ, fortiter coronatâ; cinereo-griseâ, cærulescente-albo nebulatâ, supernè roseo tinctâ, maculâ nigrâ inter nodos, tæniis numerosis angustis nigro-alboque articulatis undique creberrimè cingulatâ, intus purpureâ.*

THE ENLACED CONE. Shell stoutly ovate, grooved towards the base, encircled above with more distant punctured grooves, spire depressed, grooved, strongly coronated; ashy-grey, clouded with bluish-white, pink round the upper part, a black spot between the nodules, and very closely encircled throughout with

numerous narrow fillets articulated black and white, interior purple.

Hab. Marquesas Islands.

The pattern of this shell which is allied in form to the *C. minimus* and *miliaris*, is extremely neat, consisting of a number of closely-set narrow articulated fillets of black and white oblong dots upon a dark lavender-slate ground; besides these there are several white blotches ranging in two bands, and the upper part of the shell is tinged with rose.

Species 278. (Mus. Cuming.)

CONUS JUKESII. *Con. testâ subabbreviato-ovatâ, tenuiculâ, spirâ depresso-concavâ, spiraliter subtiliter sulcatâ, apice acuto; intensè castaneo et cærulescente-albo peculiariter nebulatâ et longitudinaliter strigatâ, intus purpurascente.*

JUKES' CONE. Shell somewhat abbreviately ovate, rather thin, spire depressly concave, spirally finely grooved, apex sharp; peculiarly clouded and longitudinally streaked with very dark chesnut and bluish white, interior light purple.

Hab. North Australia; Jukes.

Rather a thin shell and apparently of immature growth, but amply distinguished both in form and in its bold style of painting.

Species 279. (Mus. Cuming.)

CONUS PAPILLOSUS. *Con. testâ obeso-ovatâ, solidiusculâ, basi sulcatâ, spirâ concavo-excavatâ; cærulescente-griseâ, punctis minutis fuscis undique cingulatâ, intus intensè purpureâ.*

THE PAPILLOSE CONE. Shell stoutly ovate, rather solid, grooved at the base, spire concavely excavated; bluish-grey, encircled throughout with minute brown dots, interior deep purple.

KIENER, Icon. coq. viv., pl. 72. f. 4.

Hab. —— ?

A rather common species closely allied to *C. puncticulatus*, but distinguished by M. Kiener and, I believe, correctly so. The specimen figured by that author is a highly granulated one.

Species 280. (Mus. Cuming.)

CONUS LUCTIFICUS. *Con. testâ oblongâ, lævigatâ, basi crebrisulcatâ, spirâ elatiusculâ, concavo-excavatâ; albidâ, rufo-fusco tinctâ et longitudinaliter strigatâ, tæniis saturatioribus interruptis cingulatâ, fasciam albidam centralem et per marginem superiorem prætermittente, spirâ tessellatâ.*

THE MOURNFUL CONE. Shell oblong, smooth, closely grooved at the base, spire rather elevated, concavely excavated; whitish, stained and longitudinally streaked with reddish brown and encircled with interrupted fillets of a darker brown, leaving a whitish band round the centre, and along the upper margin, spire tessellated.

Hab. —— ?

Though not distinguished by any striking peculiarity of character, this species is certainly different from any that have preceded it.

280.

281 a.

281. b.

282.

283. a.

283. b.

250. b.

284.

285.

286.

LIBRARY OF THE ROYAL ASIATIC SOCIETY

Sowerby, del et lith.

Reeve, Benham & Reeve, imp.

CONUS

Supp. PLATE III.

Species 280. (Mus. Cuming.)

CONUS NUCLEUS. *Con. testa subcylindraceâ, spirâ obtuso-rotundatâ, suturis subrudibus, apice minuto, acuto; anfractibus supernè vix angulatis, transversim subtilissimè striatis; roseo-incarnatâ, medio pallidè fasciatâ, et maculis perpaucis hieroglyphicis opaco-albis ornatâ, intus purpureo-cærulescente.*

THE KERNEL CONE. Shell somewhat cylindrical, spire obtusely rounded, sutures somewhat rude, apex minute, sharp; whorls scarcely angled round the upper part, transversely very finely striated; pinkish flesh-colour, faintly banded in the middle and ornamented with a very few hieroglyphical opake white spots, interior light purplish blue.

Hab. Matnog, Island of Luzon, Philippines (found on the reefs); Cuming.

The white hieroglyphical spots which encircle this shell at distant and irregular intervals round the middle, are very similar in character to those of the *C. luteus*, the shell is not, however, of the same peculiarly delicate porcelain aspect; it is cylindrically rounded at the top, and uniformly of smaller size.

Species 281. (Mus. Cuming.)

CONUS JASPIDEUS. *Con. testâ ovato-conicâ, tenuiculâ, lævigatâ, basi subprofundè et creberrimè sulcatâ, spirâ subobtusâ, trisulcatâ; albâ, punctis maculisque hieroglyphicis aurantio-fuscis, supernè fasciâ latâ roseo-aurantiâ cingulatâ, spirâ fusco radiatim strigatâ, apice basique roseis.*

THE JASPER CONE, Shell ovately conical, rather thin, smooth, rather deeply and closely grooved at the base, spire somewhat obtuse, three-grooved; white, encircled with orange-brown dots and hieroglyphical blotches with a broad rose-orange band round the upper part, spire radiately streaked with brown, base and apex pink.

KIENER, Icon. coq. viv. pl. 55. f. 2.

Hab. Cape of Good Hope.

A beautifully painted shell in Mr. Cuming's collection agreeing precisely with M. Kiener's figure.

Species 282. (Mus. Cuming.)

CONUS CUMINGII. *Con. testâ ovato-conicâ, subcylindraceâ, lævigatâ aut obsoletè tenuiliratâ, spirâ peculiariter punctato-sulcatâ; rufescente-olivaceâ, fasciâ medianâ spiráque anfractuum margine superiori cærulescente-albis; rufescente-fusco maculatis et punctatis.*

CUMING'S CONE. Shell ovately conical, somewhat cylindrical, smooth or obsoletely finely ridged, spire peculiarly grooved and punctured; reddish olive, with a central band, spire and upper edge of the whorls white; blotched and dotted with reddish brown.

Hab. Island of Mindanao, Philippines; Cuming.

An extremely interesting new species collected by Mr. Cuming during his sojourn at the Philippine Islands.

Species 283. (Mus. Cuming.)

CONUS CERINUS. *Con. testâ subobeso-ovatâ, crassiusculâ, lævigatâ, basi peculiariter granoso-liratâ, spirâ trisulcatâ; albâ, maculis grandibus castaneo-fuscis lineatis interruptis conspicuè pictâ, apice roseo.*

THE WAXEN CONE. Shell somewhat stoutly ovate, rather thick, smooth, peculiarly granosely ridged, spire three-grooved; white, conspicuously painted with interrupted lineated chesnut blotches, apex pink.

Hab. Island of Mindanao, Cuming.

The form of this shell is different from that of any of similar style of painting, and it has a deep pink apex.

Fig. 250 *b*. (Mus. Cuming.)

CONUS SUTURATUS, Described in February 1844 at Plate XLV. from an indifferent specimen with little indication of the rich brown bands and pinkish-purple base which characterise the accompanying figure, and no information as to its locality.

Hab. Port Essington, Australia; Jukes.

Species 284. (Mus. Cuming.)

CONUS FRIGIDUS. *Con. testâ obeso-ovatâ, crassiusculâ, transversim subtiliter et eximiè liratâ, liris basin versus obsoletè granulatis, spirâ trisulcatâ; pallidè stramineâ, apice basique violaceis.*

THE COLD CONE. Shell stoutly ovate, rather thick, transversely finely and delicately ridged, ridges obsoletely granulated towards the base, spire three-grooved; pale straw-colour, base and apex violet.

Hab. —— ?

There is a peculiarity in the transverse ridges of this species becoming slightly granulated towards the base, of which it is impossible to give an idea in a figure; the upper portion of the shell is smooth and of rather solid growth; the whole is of a pale yellow colour having the base and apex tinged with dark violet.

Species 285. (Mus. Cuming.)

CONUS INFRENATUS. *Con. testâ oblongâ, tenui, subinflatâ, lævigatâ, spirâ depressiusculâ suturis rudibus; roseo-albidâ, tæniis fuscescente alboque articulatis, subdistantibus, cingulatâ, apice roseo.*

THE BRIDLED CONE. Shell oblong, thin, somewhat inflated, smooth, spire rather depressed, sutures rude; rose-white, encircled with rather distant fillets of articulated light brown and white, apex pink.

Hab. —— ?

Related in some degree to the *C. aplustre*, but certainly distinct; it is of a light rather inflated growth, of a pale rose tint, encircled throughout with rather distant conspicuous articulated fillets.

Species 286. (Mus. Cuming.)

CONUS TRIGONUS. *Con. testâ subtrigono-ovatâ, basin versus sulcatâ, spirâ peculiariter depressâ, quinque-sulcatâ, apice acuto; albâ, rufo-fusco tinctâ et fasciatâ, tæniis numerosis eximiè articulatis angustis undique cingulatâ, spirâ tessellatâ.*

THE TRIANGULAR CONE. Shell somewhat triangularly ovate, grooved at the base, spire peculiarly depressed, five-grooved, sharp at the apex; white, stained and banded with reddish-brown, and encircled with numerous narrow delicately articulated filaments, spire tessellated.

Hab. —— ?

Remarkable for its broad flattened spire; it approaches somewhat to the *C. Japonicus*, Bruguière, known only by the figure in the Enc. Méth. pl. 330. f. 3. but cannot be pronounced to be the same.

237.

236.

239.

240.

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242.

181. *b.*

243.

244.

245.

Sowerby, del et lith.

Reeve, Benham & Reeve, imp.

CONUS.

SUPP. PLATE IV.

Species 237. (Mus. Belcher.)

CONUS PIGMENTATUS. *Con. testâ oblongo-turbinatâ, transversim obsoletè crebrisulcatâ, spirâ striatâ et obliquè coronatâ; albâ, violascente tinctâ, olivaceo maculatâ, flocculis albis hic illic aspersâ, basi et aperturæ fauce vividè cæruleo-violaceis, spirâ albidâ, apice intensè roseâ.*

THE PAINTED CONE. Shell oblong-turbinated, transversely obsoletely closely grooved, spire striated and obliquely coronated; white, tinged with violet, spotted with olive, and sprinkled here and there with white flakes, base and interior of the aperture bluish-violet, deep crimson-rose at the apex.

ADAMS and REEVE, Moll. Voy. Samarang, p. 18. pl. 5. f. 11.

Hab. —— ?

Collected in the eastern hemisphere by Sir Edward Belcher during the voyage of the Sulphur, who has no record of its locality. The deep crimson-rose colouring of the apex is remarkable.

Species 238. (Mus. Cuming.)

CONUS DISPAR. *Con. testâ pyramidali-conicâ, lævigatâ, supernè acutangulâ, basin versus obliquè sulcatâ, spirâ subacutâ, lævigatâ, vel subtilissimè concentricè striatâ; cæruleo-albidâ, punctis castaneis, maculis hieroglyphicis, fasciatim dispositis, nitidè pictâ, spirâ maculis arcuatis intensè castaneis ornatâ, aperturæ fauce castaneo-fuscâ.*

THE UNLIKE CONE. Shell pyramidally conic, smooth, sharp-angled round the upper part, obliquely grooved towards the base, spire rather sharp, smooth or very finely concentrically striated; bluish white, neatly painted with chestnut dots and hieroglyphic blotches disposed in bands, spire ornamented with curved dark chestnut spots, interior of the aperture dark chestnut brown.

SOWERBY, Conch. Illus. f. 57.

Hab. —— ?

In the absence of any description, I was formerly unable to identify this species from the obscure figure in the Conchological Illustrations.

Species 239. (Fig. 239 and 240, Mus. Cuming.)

CONUS SUBULATUS. *Con. testâ oblongo-conicâ, basin versus attenuatâ et subrecurvâ, transversim sulcatâ, sulcis distantibus, regularibus, ad basin irregularibus, fortioribus, hic illic duplicatis, spirâ elevatâ, striato-sulcatâ, apice acutâ; albâ, maculis grandibus castaneis, rudè flammatis, subirregulariter trifasciatâ, maculis interdum raris.*

THE SUBULATE CONE. Shell oblong-conic, attenuated and recurved towards the base, transversely grooved, grooves distant, regular, stronger and irregular towards the base, here and there duplicate, spire raised, striately grooved, apex sharp; white, somewhat irregularly three-banded with large, rudely flammate blotches, spots sometimes rare.

KIENER, Icon. coq. viv. pl. 70. f. 2.

Hab. Islands of Mindanao and Corrigidor, Philippines, (in coarse sand from depths of about eight to twenty-five fathoms); Cuming.

I am glad to be able to confirm the value of this species from the produce of Mr. Cuming's researches among the Philippine Islands.

Species 240. (Fig. 181 *b*, Mus. Crotch.)

CONUS CAILLIAUDI. *Con. testâ pyramidali-conicâ, basin versus peculiariter attenuatâ, lævigatâ, spirâ plano-depressâ, obliquè obtusè coronatâ, apice vix elevato; fulvescente, lineis saturatioribus filosis subundulatis irregularibus undique cingulatâ, apice rosaceo.*

CAILLIAUD'S CONE. Shell pyramidally conical, peculiarly attenuated towards the base, smooth, flatly depressed at the spire, obliquely obtusely coronated, apex scarcely raised; light fulvous yellow, encircled throughout with fine thread-like lines of a darker colour, irregular and slightly waved, apex tinged with pink.

KIENER, Icon. coq. viv. pl. 55. f. 5.

Hab. —— ?

Distinguished from the *C. Caledonicus*, to which it seems very closely allied, by its narrow attenuated growth and the absence of any indication of granules; whilst the apex is more largely and rudely coronated.

Species 241. (Mus. Cuming.)

CONUS BORNEENSIS. *Con. testâ fusiformi, medio attenuatâ, spirâ acutè elevatâ, anfractibus supernè concavis*

et angulatis, infrà transversim lineari-sulcatis, sulcis ætate plus minusve obsoletis, lineis incrementi arcuatim striatis; albâ, rufo-fusco sparsim maculatâ.

The Borneo Cone. Shell fusiform, attenuated in the middle, spire sharply elevated, whorls concave and angulated round the upper part, transversely linearly grooved beneath, grooves more or less obsolete with age, arcuately striated with lines of growth; white, blotched here and there with red-brown.

Adams and Reeve, Moll. Voy. Samarang, p. 18. pl. 5. f. 8.

Hab. North-east coast of Borneo (in ten fathoms, sandy and strong bottom); Belcher.

Very closely allied to the *C. arcuatus*, but of a lighter and more attenuated growth.

Species 242. (Mus. Cuming.)

Conus papillaris. *Con. testâ fusiformi-oblongâ, spirâ elevato-turritâ, apice papillari, anfractibus supernè acutè concavo-angulatis, peculiariter tenuicoronatis, nodulis subobliquis, infrà lævibus; albidâ, aurantio-ferrugineo longitudinaliter strigato-nebulatâ.*

The papillary Cone. Shell fusiformly oblong, spire elevately turreted, apex papillary, whorls sharply concavely angulated round the upper part, peculiarly finely coronated, nodules somewhat oblique, smooth beneath; whitish, longitudinally streaked in a clouded manner with orange-rust.

Hab. —— ?

A very characteristic species collected by Sir Edward Belcher during the voyage of the Sulphur, of which the locality was not preserved. The apex is papillary, and the whorls are sharply obliquely coronated, the interstices between the nodules being coloured with the same peculiar orange-rust with which the lateral surface of the shell is painted.

Species 243. (Mus. Cuming.)

Conus Vautieri. *Con. testâ subobeso-turbinatâ, solidâ, lævigatâ, basi sulcatâ, sulcis subdistantibus, spirâ plano-depressâ, fortiter coronatâ, striatâ et sulcatâ, liris minutè crenulatis; albâ, roseo-fusco pallidè tinctâ, maculis roseo-fuscis, ad latus opaco-albis, hic illic aggregatis, ornatâ.*

Vautier's Cone. Shell rather stoutly turbinated, solid, smooth, grooved at the base, grooves rather distant, spire flatly depressed, strongly coronated, striated and grooved, the ridges being minutely crenulated; white, tinged with rose-brown spots, opake-white at the side, here and there aggregated together.

Kiener, Icon. coq. viv. pl. 100. f. 3.

Hab. —— ?

I find nothing in this species to distinguish it from *C. pulicarius* except colour, yet it seems distinct and presents no intermediate variety.

Species 244. (Mus. Cuming.)

Conus ochraceus. *Con. testâ subangulato-conicâ, lævigatâ, ad basin subirregulariter sulcatâ, spirâ planiusculâ, canaliculatâ, apice elevatâ; albâ, fasciis latissimis duabus, maculis oblongo-quadratis punctisque fuscescente-ochraceis ornatâ.*

The ochre Cone. Shell somewhat angularly conic, smooth, rather irregularly grooved at the base, spire a little flattened, raised at the apex, channelled; white, ornamented with two very broad brownish ochre bands, the intervals being marked with oblong-square spots and dots of the same colour.

Lamarck, Anim. sans vert. (Deshayes' edit.) vol. xi.

Hab. West Indies.

This species which, in the absence of any specimen, I thought to be a discoloured *C. Proteus*, appears to be distinct.

Species 245. (Mus. Cuming.)

Conus floridulus. *Con. testâ oblongo-turbinatâ, solidiusculâ, ad basin tumidiusculâ, liris perpaucis subdistantibus, spirâ striatâ, obsoletè obliquè coronatâ, apice acutâ; violascente-albâ, basi vividè roseo-violaceâ, medio fasciatim immaculatâ, suprà infràque aurantio-fusco tinctâ et punctatâ, apice pallidè rufescente.*

The blooming Cone. Shell oblong-turbinated, rather solid, somewhat swollen at the base, with a few rather distant ridges, spire striated, obsoletely obliquely coronated, apex sharp; violet-white, brightly tinged at the base with rose-violet, in the centre is an unspotted band, stained and dotted above and below with orange-brown, apex pale red.

Adams and Reeve, Moll. Voy. Samarang, p. 18. pl. 5. f. 9.

Hab. —— ?

A shell of rather solid growth, collected by Sir Edward Belcher, during the voyage of the Sulphur, very deeply stained with violet at the base, and delicately suffused with that colour throughout; and a pale band is formed in the middle by the interruption of numerous orange-brown dots, which are seen above and below it. The spire is very indistinctly undulately noduled, and faintly spotted with orange-brown which grows reddish towards the apex.

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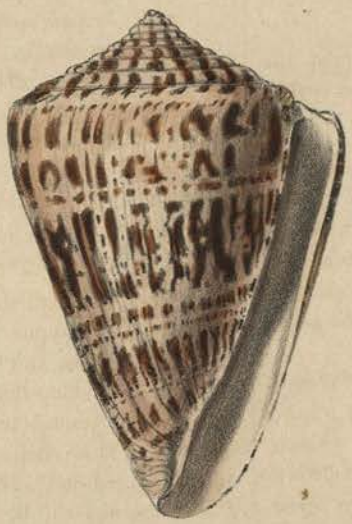

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G.B.S. del et lith.

R.B.& R. imp.

CONUS.

SUPP. PLATE V.

Species 246. (Mus. Dennison.)

CONUS LEMNISCATUS. *Con. testâ subangulato-conicâ, medio leviter contractâ, basin versus attenuatâ, undique subtiliter liratâ; spirâ acuminatâ, incrementi lineis arcuatis undique notatâ, apice acutâ; albidâ, fuscescente-aurantio, longitudinaliter undulatâ, liris transversis alternis fusco-aurantio subtilissimè articulatis.*

THE SILKEN-STRINGED CONE. Shell somewhat angularly conic, slightly contracted towards the middle, attenuated towards the base, delicately ridged throughout; spire acuminated, marked throughout with carved lines of growth, apex sharp; whitish, longitudinally waved with brown-orange, every alternate transverse ridge very finely articulated with the same colour.

Hab. ——?

This very interesting species was found amongst the shells collected by Sir Edward Belcher during the voyage of the Sulphur, without any information as to its locality.

Species 247. (Mus. Cuming.)

CONUS STILLATUS. *Con. testâ oblongâ, inflatâ, transversim striatâ, basin versus crebrisulcatâ, spirâ depressiusculâ, regulariter striato-sulcatâ; lacteâ, supernè maculis ustulato-fuscis in lineis descendentibus, maculis saturatioribus ad basin pictâ.*

THE TRICKLED CONE. Shell oblong, inflated, transversely striated, closely grooved towards the base, spire rather depressed, regularly striately grooved; cream-white, painted at the upper part with burnt-brown spots, descending in lines, with darker brown spots at the base.

Hab. Moluccas.

Distinguished from *C. spectrum* slightly in form, but more particularly by the character of its markings, the colour of which is a darker brown.

Species 248. (Mus. Cuming.)

CONUS EMACIATUS. *Con. testâ pyramidali-conicâ, crassiusculâ, solidâ, medio contractâ, basin versus attenuatâ, liris angustis undique filatim funiculatâ, spirâ depressâ, lævigatâ; albidâ, vel luteâ, liris saturatioribus, basi intensè cæruleo-violaceâ.*

THE EMACIATED CONE. Shell pyramidally conic, rather thick, solid, contracted in the middle, attenuated towards the base, corded throughout with narrow thread-like ridges, spire depressed; smooth, whitish or yellowish, ridges rather darker, base deep blue-violet.

Hab. Philippine Islands; Cuming.

Closely allied to *C. virgo*, but distinguished in a very characteristic manner by its contracted attenuated growth, and by the thread-like cords with which it is encircled. M. Gubba of Havre also possesses specimens.

Species 249. (Mus. Cuming.)

CONUS LORENZIANUS. *Con. testâ obeso-conicâ, crassâ, ponderosâ, lævigatâ, spirâ elevatiusculâ, lævigatâ; albâ, flammis maculisque rufo-castaneis usque ad basin fasciatim pictâ.*

LORENZ'S CONE. Shell stoutly conical, thick, ponderous, smooth, spire rather elevated, smooth; white, painted down to the base with flames and spots, disposed in bands.

CHEMNITZ, Conch. Cab. vol. ii. p. 51. pl. 181. f. 1754–8. *Conus flammeus*, Lamarck.

Hab. Honduras; Dyson.

For want of a sufficient regard to Chemnitz' character of this species, "basi punctis rubicundis punctata," I referred the *C. Lorenzianus* at Pl. 27, to a shell in the collection of M. Delessert having that name attached to it and bearing some general resemblance to the figure of the Conchylien Cabinet. This shell proves to be identical with the species figured at Pl. 16, as *C. zebra*, now distinguished as *C. virgatus*, and will be found to differ particularly from *C. Lorenzianus* in the character above recited, never being spotted or dotted at the base. Chemnitz' figure will be found to agree in this respect with the *C. flammeus* of Lamarck, as he himself truly indicated, with the aid of the figure in the Encyclopédie Méthodique (Pl. 336. f. 1) and of M. Kiener (Pl. 23. f. 1), and by an easy transition with the figure in the accompanying plate, which represents a stout peculiarly marked state of the species collected by Mr. Dyson at Honduras.

Species 250. (Mus. Cuming.)

CONUS ÆGROTUS. *Con. testâ oblongo-turbinatâ, crassiusculâ, basi subrudè contortâ, transversim obsoletè undulato-striatâ, longitudinaliter lineis incrementi irregulariter*

notatâ, spirâ plano-depressâ, apicem versus obsoletè minutè coronatâ; lacteâ, punctis minutissimis numerosis pallidè fuscescentibus seriatim notatâ, fasciâ immaculatâ in medio, basi intensè livido-violaceâ.

The sickly Cone. Shell oblong turbinated, rather thick, somewhat rudely twisted at the base, transversely obsoletely striated in a slightly waved manner, irregularly longitudinally marked with lines of growth, spire flatly depressed, minutely obsoletely coronated towards the apex; cream-colour, marked with rows of very minute pale brown dots, leaving a white band in the centre, base dark livid-violet.

Hab. ——?

This species of which I have seen many similar examples, is closely allied to *C. lignarius*, especially to that variety figured by M. Kiener, Icon. coq. viv. pl. 107. f. 3, under the name *C. Cecilei var.*

Species 251. (Mus. Cuming.)

Conus inquinatus. *Con. testâ subpyriformi-conicâ, crassiusculâ, lævigatâ, basi subobsoletè liratâ, spirâ obtusâ, lævigatâ, suturis subrudibus; purpurascente-albâ, castaneo profusè longitudinaliter tinctâ, fasciâ maculorum albicantium in medio cingulatâ, liris basalibus sparsim albi-articulatis.*

The splashed Cone. Shell somewhat pyriformly conical, rather thick, smooth, somewhat obsoletely ridged at the base, spire obtuse, smooth, sutures rather rude; purplish-white, profusely longitudinally stained with chestnut, encircled round the middle with a band of light blotches, basal ridges sparingly articulated with white.

Hab. West of Africa.

Mr. Cuming possesses two or three examples of this species, which I am quite unable to refer to any hitherto described.

Species 252. (Mus. Cuming.)

Conus Bernardi. *Con. testâ cylindraceo-oblongâ, subinflatâ, basin versus attenuatâ, supernè rotundatâ, lævigatâ, basin versus sulcatâ, sulcis distantibus, subprofundis, minutè crenulatis, spirâ lævigatâ, elevatiusculâ; fulvo-castaneâ, maculis punctisque perpaucis albis, hic illic aggregatis, notatâ.*

Bernard's Cone. Shell cylindrically oblong, slightly inflated, attenuated towards the base, rounded at the upper part, smooth, grooved towards the base, grooves distant, rather deep, minutely crenulated, spire smooth, rather elevated; fulvous chestnut, marked with a few white dots and blotches here and there aggregated together.

Kiener, Icon. coq. viv. p. 220. pl. 100. f. 2.

Var. intensè purpureo-nigrâ, parum albi-maculatâ.

Conus Gubba, Kiener.

Hab. Island of Luzon, Philippines (dredged from a depth of seven fathoms in sandy mud); Cuming.

This shell has been long known to me, but I have always regarded it as a variety of *C. cinereus*.

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G.B.S. del. et lith.

R.B. & R. imp

CONUS.

SUPP. PLATE VI.

Species 253. (Mus. Cuming.)

CONUS MAGELLANICUS. *Con. testâ subtrigono-turbinatâ, lævigatâ, liris subtilibus angustis, distantibus, cingulatâ, superioribus ferè obsoletis, spirâ concavo-depressâ, coronatâ, apice elevato; vividè citrino-luteâ, medio supernè et infernè maculis grandibus hieroglyphicis, albis, fusco-umbratis et punctatis pulcherrimè fasciatim notatâ, apice rosaceo.*

THE MAGELLAN CONE. Shell rather triangularly turbinated, smooth, encircled with fine narrow distant ridges, the upper of which are nearly obsolete, spire concavely depressed, coronated, apex raised; bright lemon-yellow, very beautifully marked in the middle and round the upper and lower parts with bands of large hieroglyphic white blotches, dotted and shaded with brown, apex pink.

HWASS, Bruguière, Enc. Méth. *Conus* No. 31. pl. 322. f. 3.

Hab. ——?

The specimen here figured of this very beautiful species, for which Mr. Cuming is indebted to the liberality of M. Gubba, is the only one in this country. I am unable to confirm the locality after which it is named.

Species 254. (Mus. Cuming.)

CONUS CROTCHII. *Con. testâ subabbreviato-conicâ, solidiusculâ, lævigatâ, basi striatâ, spirâ subplano-convexâ, striato-sulcatâ; albâ, lineis filosis ustulato-fuscis undique creberrimè cingulatâ, maculis perpaucis nivosis interdum interruptâ, spirâ cum margine anfractûs ultimi fusco maculatâ.*

CROTCH'S CONE. Shell somewhat abbreviately conical, rather solid, smooth, striated at the base, spire somewhat flatly convex, striately grooved; white, very closely encircled throughout with fine thread-like burnt-brown lines, sometimes interrupted with a few snow-white spots, spire with the edge of the last whorl spotted with brown.

Hab. Saldanha Bay, South Africa.

This species which has been confounded with certain varieties of *C. venulatus* from the Cape de Verd Islands, may be distinguished by the spire being striately grooved.

I have the pleasure to name it in honour of a zealous amateur collector of the genus, the Rev. W. R. Crotch, of Taunton.

Species 255. (Mus. Cuming.)

CONUS GILVUS. *Con. testâ trigono-conicâ, lævigatâ, basi sulcatâ, sulcis paucis, distantibus, spirâ depresso-convexâ, lævigatâ, suturis subrudibus; violaceo-fuscâ, medio fasciâ pallidâ cingulatâ, supernè rufescente-tinctâ, maculis perpaucis parvis intensè brunneo-rufis per marginem.*

THE BRICK-COLOURED CONE. Shell triangularly conical, smooth, grooved at the base, grooves few and distant, spire depressly convex, smooth, sutures somewhat rude; violet-brown, encircled by a pale band round the middle, tinged at the upper part, with a few small deep brown-red spots along the edge.

Hab. Saldanha Bay, South Africa.

I am not aware of any species which approaches this in respect of colouring.

Species 256. (Mus. Cuming.)

CONUS EXIMIUS. *Con. testâ subtrigono-turbinatâ, solidiusculâ, supernè acutè angulatâ, lævigatâ, basin versus sulcatâ, sulcis distantibus, regularibus, spirâ subcanaliculatâ, ad apicem elevatâ; albâ, roseo-violaceo suffusâ, aurantio-castaneo suprà et infrà maculatâ et variegatâ, punctis vittisque angustis articulatis hic illic notatâ, spirâ maculis paucis distantibus pictâ.*

THE CHOICE CONE. Shell somewhat triangularly turbinated, rather solid, sharply angled at the top, smooth, grooved towards the base, grooves distant, regular, spire slightly channelled, raised at the apex; white, suffused with rose-violet, blotched and variegated above and below with orange-chestnut, marked here and there with dots and narrow articulated fillets, spire painted with a few distant spots.

Hab. Moluccas.

A richly painted species, approximating in some degree to *C. voluminalis.*

Species 257. (Mus. Cuming.)

CONUS ALABASTER. *Con. testâ subfusiformi-turbinatâ, basi paululum recurvâ, liris angustis binis undique cingulatâ, interstitiis striatis et cancellatis, spirâ canaliculatâ, acutè et crebrè striatis, apice elato, acutissimo; cæru-*

lescente-albâ, spirâ apicem versus fuscescente pallidè tessellatâ.

THE ALABASTER CONE. Shell somewhat fusiformly turbinated, a little recurved at the base, encircled throughout with delicate narrow ridges in pairs, interstices striated and cancellated, spire channelled, sharply and closely striated, apex raised, very sharp; clear bluish-white, faintly tessellated towards the apex with light brown.

ADAMS and REEVE, Moll. Voy. Samarang.

Hab. China Sea.

The accompanying figure, I regret to say, gives a very inadequate idea of this very pure white and delicately sculptured species, the shell being enveloped by a dirty fibrous epidermis.

Species 258. (Mus. Cuming.)

CONUS LACHRYMOSUS. *Con. testâ oblongo-conicâ, tenuiculâ, subventricosâ, lævigatâ, basin versus contractâ et liratâ, spirâ striato-sulcatâ, apice acutâ; fulvo-aurantiâ, lineis interruptis saturatioribus cingulatâ, medio et supernè albidâ, strigis fulvo-aurantiis, promiscuè undulatis, longitudinaliter pictâ, spirâ tinctâ et variegatâ.*

THE WEEPING CONE. Shell oblong-conical, rather thin, slightly ventricose, smooth, contracted and ridged towards the base, spire striately grooved, sharp at the apex; fulvous-orange, encircled with interrupted lines of a darker colour, white in the middle and along the upper edge, painted longitudinally with promiscuously waved orange-brown streaks, spire stained and variegated with the same colour.

Hab. ——?

Marked in a manner perfectly distinct from any species yet described.

Species 259. (Mus. Cuming.)

CONUS PRIMULA. *Con. testâ subabbreviato-conicâ, solidiusculâ, basin versus liratâ, liris subdistantibus, spirâ depresso-convexâ, coronatâ, apice obtusâ; eximiè roseo-aurantiâ, supernè lacteâ, maculis grandibus lacteis oblongo-quadratis fasciatim medio cingulatâ.*

THE PRIMROSE CONE. Shell somewhat abbreviately conical, rather solid, ridged towards the base, ridges somewhat distant, spire depressly convex, coronated, obtuse at the apex; delicate rose-orange, white round the upper edge, encircled round the middle with a band of large oblong-square cream-white spots.

Hab. ——?

Of a delicate nankeen colour, banded in the middle, somewhat in the style of *C. lithoglyphus*.

Species 260. (Mus. Cuming.)

CONUS FILAMENTOSUS. *Con. testâ oblongo-conicâ, supernè obtusè angulatâ, subinflatâ, lævi, sulcis angustis distantibus undique cingulatâ, spirâ multisulcatâ, apice elato, acutissimo; albidâ, luteo-aurantio, hic illic coccineo-tinctâ, profusè pictâ, lineis subtilissimis filamentosis, saturatioribus undique confertim cingulatâ.*

THE FILAMENTOSE CONE. Shell oblong-conical, obtusely angled at the upper part, slightly inflated, smooth, encircled throughout with narrow distant grooves, spire many-grooved, apex raised and very sharp; whitish, profusely painted with yellowish orange, here and there scarlet-tinged, and closely encircled throughout with very fine thread-like lines of a darker colour.

Hab. ——?

Encircled, like *C. conspersus*, with very fine thread-like lines about five between each groove.

Species 261. (Mus. Cuming.)

CONUS RIVULARIUS. *Con. testâ cylindraceo-conicâ, supernè obtusâ, transversim subtiliter liratâ, liris granulatis, spirâ striato-sulcatâ, obsoletè coronatâ; albidâ, maculis grandibus aurantio-fuscis bifasciatâ et peculiariter undulato-flammatâ, granulis albidis.*

THE STREAMLET-MARKED CONE. Shell cylindrically conical, obtuse at the upper part, transversely finely ridged, ridges granulated, spire striately grooved, obsoletely coronated; whitish, with two bands of large orange-brown blotches, peculiarly undulately flamed, granules whitish.

Hab. Moluccas.

I have seen several examples of this species, all characterised by the undulated flammules of colour.

Species 262. (Mus. Cuming.)

CONUS STRIOLATUS. *Con. testâ subcylindraceo-oblongâ, solidâ, undique subtilissimè liratâ et striatâ, basi leviter contortâ, spirâ convexâ, striato-sulcatâ, infra suturas peculiariter marginatâ, apice acutissimo; albâ, aurantio-fuscescente pallidè fasciatim nebulatâ, liris fuscescente obscurè minutissimè punctatis, apice roseo.*

THE FINELY-STRIATED CONE. Shell somewhat cylindrically oblong, solid, very finely ridged and striated throughout, slightly twisted at the base, spire convex, striately grooved, peculiarly margined beneath the sutures, apex very sharp; white, faintly clouded in a banded style with orange-brown, ridges obscurely very minutely dotted with brown, apex pink,

KIENER, Icon. coq. viv. pl. 105. f. 1.

Hab. ——?

This species which M. Kiener and I had both set apart, independently, as a new one, is little removed from a certain variety of the *C. magus*.

263.

264.

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266.

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268.

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272.

G.B.S. del et lith.

R.B.& R. imp.

CONUS.

SUPP. PLATE VII.

Species 263. (Mus. Cuming.)

CONUS CORONATUS. *Con. testâ fusiformi-turbinatâ, medio obesâ, liris subtilibus æquidistantibus cingulatâ, spirâ amplâ, fortiter coronatâ; suprà albâ, infrà olivaceo-cinereâ, floccis albis parvulis oblongo-quadratis basi notatâ.*

THE CROWNED CONE. Shell fusiformly turbinated, stout in the middle, encircled throughout with fine equidistant ridges, spire large, strongly coronated; white at the upper part, olive-ash beneath, marked with small oblong-square white flakes at the base.

Hab. Island of Ticao, Philippines (on the reefs); Cuming.

The spire of this little species is of unusually large proportion.

Species 264. (Mus. Cuming.)

CONUS PEALII. *Con. testâ subfusiformi-conicâ, supernè angulatâ, lævi, basin versus sulcatâ, sulcis conspicuis, regularibus, pertusis, spirâ elevatâ, subcanaliculatâ, subtilissimè arcuatim striatâ, apice acutâ; albidâ, castaneo sparsim longitudinaliter nebulatâ et per marginem anfractuum punctatâ, vittis numerosis angustis castaneo et opaco-albo articulatis undique cinctâ.*

PEAL'S CONE. Shell somewhat fusiformly conical, angled round the upper part, smooth, grooved towards the base, grooves conspicuous, regular, pricked, spire elevated, very slightly channelled, and finely arcuately striated, sharp at the apex; whitish, longitudinally clouded, and along the edge of the whorls, dotted with chestnut, encircled throughout with numerous narrow fillets of articulated chestnut and opake white.

GREEN, Trans. Albany Institute, U. S.

Hab. Florida.

A very distinct species, allied in form to the *C. verrucosus* and *acutangulus*.

Species 265. (Mus. Cuming.)

CONUS ATRAMENTOSUS. *Con. testâ obeso-conicâ, subpyriformi, solidâ, creberrimè striato-sulcatâ, sulcis pertusis, spirâ reticulatâ; cinereo-atrâ, punctis paucis grandibus albis supernè aspersâ, basi albâ.*

THE INKY CONE. Shell stoutly conical, somewhat pear-shaped, solid, very closely striately grooved, grooves pricked, spire reticulated with grooves; ashy-black, sprinkled at the upper part with a few large white dots, base white.

Hab. Island of Mindoro, Philippines (under stones at low water); Cuming.

A very peculiar stout little species encircled with fine grooves, the spire being reticulated with the same.

Species 266. (Mus. Cuming.)

CONUS SPICULUM. *Con. testâ fusiformi, utrinque acutè attenuatâ, solidiusculâ, supernè angulatâ, lævigatâ, basi liratâ, spirâ acutissimè acuminatâ; albidâ, maculis punctisque paucis castaneis aspersâ.*

THE LITTLE DART CONE. Shell fusiform, sharply attenuated at both ends, rather solid, angled round the upper part, smooth, ridged at the base, spire very sharply acuminated; whitish, sprinkled with a few chestnut spots and dots.

Hab. Cagayan, Island of Mindanao (in sandy mud at the depth of twenty-five fathoms); Cuming.

This peculiarly formed shell, of which I have seen two or three specimens of similar character, might be taken for the young of *C. generalis*, from which it differs on comparison.

Species 267. (Mus. Cuming.)

CONUS INSCULPTUS. *Con. testâ fusiformi, basi multò attenuatâ, supernè angulatâ, undique sulcatâ, sulcis latiusculis, longitudinaliter cancellatis, liris intermediis planatis, spirâ elevatâ, striatâ, margine subtilissimè coronatâ; sordidè fulvâ.*

THE ENGRAVED CONE. Shell fusiform, much attenuated at the base, angled round the upper part, grooved throughout, grooves rather broad, longitudinally cancellated, intermediate ridges flattened, spire elevated, very finely coronated at the edge; dull fulvous colour.

KIENER, Icon. coq. viv. pl. 99. f. 2.

Hab. Cagayan, Island of Mindanao (in sandy mud at the depth of twenty-five fathoms); Cuming.

I cannot but think this may prove to be a dwarf variety of the *C. Orbigni*.

Species 268. (Mus. Cuming.)

CONUS INDURATUS. *Con. testâ subtrigono-conicâ, solidiusculâ, lævigatâ, deinde sulcatâ, sulcis distantibus, regularibus, spirâ subplanatâ, striatâ, apice elevatâ, acutâ; livido-cærulescente, maculis paucis punctisque oblongo-quadratis, intensè castaneis, aspersâ, aperturæ fauce intensè fuscâ.*

THE HARDENED CONE. Shell somewhat triangularly conical, rather solid, smooth, then grooved, grooves distant, regular, spire rather flattened, striated, raised and sharp at the apex; livid-blue, sprinkled with a few very dark chestnut spots and oblong-square dots, interior of the aperture deep brown.

Hab. Red Sea.

The dark chestnut spots are rather larger on the spire, and towards the base.

Species 269. (Mus. Cuming.)

CONUS VIMINEUS. *Con. testâ cylindraceo-fusiformi, basin versus multo attenuatâ, liris transversis striisque elevatis concentricis undique creberrimè cancellatis, spirâ subcanaliculatâ, cancellatâ, apice acutâ; fulvescente.*

THE WICKER CONE. Shell cylindrically fusiform, much attenuated towards the base, very closely cancellated throughout with transverse ridges and concentric elevated striæ, spire slightly channelled, cancellated, sharp at the apex; pale fulvous yellow.

Hab. Cagayan, Island of Mindanao, Philippines (in sandy mud at the depth of twenty-five fathoms); Cuming.

This species is not distinguished by any design of colouring, but it is remarkable for the elaborate net-work of its sculpture.

Species 270. (Mus. Cuming.)

CONUS INÆQUALIS. *Con. testâ subpyriformi, lævigatâ, basi pauciliratâ, spirâ subobesâ, bisulcatâ, sulcis confertis, apice subacuto; fulvescente-albâ, lineis fulvis minutis cingulatâ, fasciâ angustâ albâ in medio, spirâ albâ, maculis grandibus rufo-fulvis radiatâ, apice pallidè rosaceo.*

THE UNEQUAL CONE. Shell somewhat pyriform, smooth, few-ridged at the base, spire rather stout, two grooved, grooves close-set, rather sharp at the apex; fulvous white, encircled with very fine fulvous lines leaving a narrow white band in the middle, spire white, rayed with large reddish fulvous spots, apex pinkish.

Hab. —— ?

Although the spire of this shell is rayed with large blotches of colour, there are no spots on the surface beneath, which is encircled with very fine lines.

Species 271. (Mus. Cuming.)

CONUS FUCATUS. *Con. testâ conico-turbinatâ, lævigatâ aut obsoletè peculiariter indentatâ, basi liratâ, spirâ conspicuè striato-sulcatâ, liris intermediis granulatis, apice elato, acuto; cinereo-olivaceâ, spirâ albo marmoratâ.*

THE DYED CONE. Shell conically turbinated, smooth or obsoletely peculiarly indented, ridged at the base, spire conspicuously striately grooved, intermediate ridges granulated, apex raised, sharp; ash-olive, spire marbled with white.

Hab. Philippine Islands; Cuming.

Care must be taken not to confound the young of *C. Taheitensis* with this species, from which it is quite distinct.

Species 272. (Mus. Cuming.)

CONUS GRANIFER. *Con. testâ subfusiformi-conicâ, undique granosâ, basi liratâ, spirâ subcanaliculatâ, margine subtiliter coronatâ; albâ, apice basique pallidè fuscescente tinctâ.*

THE GRAINED CONE. Shell somewhat fusiform, conical, granose throughout, ridged at the base, spire slightly channelled, finely coronated at the edge; white, tinged with light brown at the base and apex.

Hab. Philippine Islands; Cuming.

The granules of this shell have a specific character.

273.

274.

275.

276.

277 a.

277. b.

278.

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G.B.S. del et lith.

R.B. & R. imp.

CONUS.

SUPP. PLATE VIII.

Species 273. (Mus. Cuming.)

CONUS COLLISUS. *Con. testâ oblongo-conicâ, solidiusculâ, subinflatâ, lævigatâ, transversim sulcatâ, sulcis distantibus, superioribus plus minusve obsoletis, spirâ striato-sulcatâ, apice acutâ, aperturâ latiusculâ; albidâ, fulvo nebulatâ et variegatâ.*

THE BRUISED CONE. Shell oblong-conical, rather solid, somewhat inflated, smooth, transversely grooved, grooves distant, upper ones more or less obsolete, spire striately grooved, sharp at the apex, aperture rather broad; whitish, clouded and variegated with fulvous colour.

Hab. —— ?

Of this species Mr. Cuming possesses several examples, differing very much in the pattern of their colouring, but all distinguished by an association of character from *C. spectrum*, which is the next allied.

Species 274. (Mus. Gubba.)

CONUS SANGUINOLENTUS. *Con. testâ subtrigono-conicâ, solidâ, lævigatâ, basi obscurè liratâ, spirâ plano-depressâ, subcanaliculatâ, apice elevatâ, acutâ; undique roseo-coccineo suffusâ, flammis paucis sanguineis latiusculis, irregularibus, distantibus longitudinaliter pictâ, spirâ sanguineo indistinctè tessellatâ.*

THE BLOOD-STAINED CONE. Shell somewhat triangularly conical, solid, smooth, obscurely grooved at the base, spire flatly depressed, slightly channelled, raised and sharp at the apex; suffused throughout with rose-scarlet, and painted longitudinally with a few rather broad, irregular, blood-stained flames, spire indistinctly tessellated with the same colour.

Hab. —— ?

A very characteristic new species, remarkable for the warm delicacy of its colouring.

Species 275. (Mus. Gubba.)

CONUS HYÆNA. *Con. testâ subobeso-conicâ, lævigatâ, basi crebriliratâ, spirâ subrotundatâ, striatâ et unisulcatâ, suturis rudibus, apice acuto; albâ, carneo-fuscescente pallidè bifasciatâ, lineis fuscis brevibus transversis in flammis longitudinalibus dispositis irregulariter pictâ.*

THE HYÆNA CONE. Shell somewhat stoutly conical, smooth, closely ridged at the base, spire somewhat rounded, striated and one-grooved, sutures rude, apex sharp; white, faintly two-banded with flesh brown, and somewhat irregularly painted with short transverse brown lines, disposed one under the other in longitudinal flames.

HWASS, Bruguière Enc. Méth. *Conus* No. 55.

Hab. —— ?

This, and not the variety of *C. punctatus*, is, according to Kiener, the true *C. hyæna* of the Encyclopédie Méthodique.

Species 276. (Mus. Cuming.)

CONUS BOIVINII. *Con. testâ cylindraceo-oblongâ, suprà et infrà transversim sulcatâ, sulcis distantibus, regularibus, pertusis, medio vix striatis, spirâ peculiariter concavo-depressâ, spiraliter profundè sulcatâ, apice paululum elevatâ, subobtusâ; albicante, carneo-fuscescente bifasciatâ, maculis perpaucis hieroglyphicis castaneo-rufis, nonnullis subamplis, aspersâ.*

BOIVIN'S CONE. Shell cylindrically oblong, transversely grooved above and below, grooves distant, regular, pricked, scarcely striated in the middle, spire peculiarly concavely depressed, spirally deeply grooved, a little elevated, but obtuse, at the apex; white, encircled with two bands of light flesh-brown, and sprinkled with a few hieroglyphic chestnut-red spots, some of which are rather large.

KIENER, Icon. coq. viv. pl. 64.

Hab. —— ?

I have been much gratified with the examination of this shell in Paris, the only example of the species that has been seen. It is certainly very distinct from any hitherto described, being remarkably characterized by its concavely depressed spire and punctured striæ. The character of the marking partakes somewhat of that of *C. gubernator*. M. Boivin informs me, that he obtained it at the sale of an old collection at Havre, into which port it was probably brought from some remote locality.

Species 277. (Mus. Cuming.)

CONUS CUMINGII. *Con. testâ subtrigono-conicâ, solidius-*

culâ, medio subcontractâ, supernè lævigatâ, lineis incrementi longitudinaliter arcuatim striatâ, basi subtiliter liratâ, liris irregularibus, subundulatis, spirâ depressiusculâ, lævigatâ, apice elevato, acuto; albidâ, aurantio-coccineo longitudinaliter tinctâ, maculis perpaucis fuscis interruptis et obscuris fasciatim notatâ, aperturæ fauce rosaceâ.

Cuming's Cone. Shell somewhat triangularly conical, rather solid, slightly contracted in the middle, smooth above, longitudinally arcuately striated with lines of growth, finely ridged at the base, ridges irregular, slightly waved, spire rather depressed, smooth, apex elevated, acute; whitish, longitudinally stained with orange-scarlet, and marked in a banded style with a few interrupted and obscure brown spots, interior of the aperture pink.

Hab. Salango, West Columbia (at a depth of about seven fathoms); Cuming.

In general form and tinge of colour this species approaches the *C. virgatus*, but it is distinguished by a very different design of marking. Several specimens were collected in the above-named locality by Mr. Cuming, to whom I have the pleasure of dedicating it.

Species 278. (Mus. Cuming.)

Conus hepaticus. *Con. testâ conico-turbinatâ, supernè lævigatâ, basin versus sulcatâ, spirâ subcanaliculatâ; albâ, prope apicem fuscescente.*

The liver-coloured Cone. Shell conically turbinated, smooth above, grooved towards the base, spire slightly channelled; white, stained with brown at the apex.

Kiener, Icon. coq. viv. pl. 97. f. 3.

Hab. —— ?

I have not had an opportunity of seeing the type of M. Kiener's *C. hepaticus*. The shell here figured very nearly approaches it, whilst it does not agree with any other species.

283. b.

279.

280.

280 b.

281. a.

281. b.

262. b.

282. a.

282. b.

283.

Sowerby del. et lith.

Reeve Benham & Reeve imp.

CONUS.

SUPP. PLATE IX.

Fig. 263 *a*. (Mus. Cuming.)

CONUS CORONATUS. Another variety of Species 263, figured in the preceding plate.

Species 279. (Mus. Cuming.)

CONUS LUGUBRIS. *Con. testâ subabbreviato-conicâ, supernè obesâ, transversim subtilissimè striatâ, ad basin rudè liratâ, liris paucis, distantibus, spirâ elevatiusculâ, conspicuè sulcatâ; purpureo-nigrâ, maculis numerosis parvis albis aggregatis obscurè reticulatâ.*

THE MOURNING CONE. Shell somewhat abbreviately conical, stout at the upper part, transversely very finely striated, rudely ridged at the base, ridges few and distant, spire slightly elevated, conspicuously grooved; purple-black, obscurely reticulated here and there with numerous aggregated small white spots.

Conus hieroglyphicus var., Kiener, Icon. coq. viv. pl. 103. f. 3.

Hab. —— ?

Perfectly distinct from *C. hieroglyphicus* which is a granulated shell of more solid growth, and differently marked. The specimen here figured I have compared with two equally characteristic examples in M. Gubba's collection.

Species 280. (Fig. *a* and *b*, Mus. Gubba.)

CONUS ELISÆ. *Con. testâ cylindraceo-conicâ, lævigatâ, basin versus subobsoletè liratâ, spirâ rotundatâ, striatâ, apice obtusâ; fulvo-castaneâ, maculis numerosis albidis subrotundatis parvis et minutis, promiscuè aggregatis, reticulatâ.*

ELIZA'S CONE. Shell rather cylindrically conical, smooth, somewhat obsoletely ridged towards the base, spire rounded, striated, obtuse at the apex; fulvous-chestnut, reticulated with numerous somewhat rounded, small and minute whitish spots, promiscuously aggregated together.

KIENER, Icon. coq. viv. pl. 34. f. 1.

Eadem nana, *Conus stellatus*, Kiener.

Hab. —— ?

A very dark fulvous-chestnut shell, distinguished by numerous aggregations of minute whitish spots, not linear reticulations, as in the textile group.

Species 281. (Mus. Belcher.)

CONUS PICA. *Con. testâ cylindraceo-ovatâ, tenuiculâ, tumidâ, inflatâ, spirâ depresso-convexâ, creberrimè impresso-sulcatâ, apice parvo, acutè elevato, basi linearisulcatâ, sulcis subdistantibus; albâ, fusco-nigricante plus minusve grandi-maculatâ et minutè punctatâ.*

THE MAGPIE CONE. Shell cylindrically ovate, rather thin, swollen, inflated, spire depressly convex, very closely impressly grooved, apex small, acutely elevated, base linearly grooved, grooves rather distant; white, minutely dotted and more or less coloured with large blotches of brownish black.

ADAMS and REEVE, Moll. Voy. Samarang, p. 18. pl. 5. f. 10.

Conus spectrum Sumatræ, Chemnitz.

Hab. Island of Balambangan, north end of Borneo (on a shallow coral reef); Belcher.

This is certainly distinct from the Linnæan *C. spectrum*. It was found in abundance by Sir Edward Belcher at the above-named locality.

Species 262. (Fig. 262 *b*, Mus. Gubba.)

CONUS CONSPERSUS. This species described by me in 1843 from an indifferent specimen, in the collection of Mr. Gruner of Bremen, is identical with that subsequently named *C. Verreuxii* by M. Kiener. Although the original specimen did not furnish a very characteristic figure (Pl. 247. f. 262), the leading feature of the species, consisting of its being encircled throughout with fine close-set hair lines, was particularly dwelt upon in the description. The magnificent specimen here figured is from the collection of M. Gubba of Havre, and to the characters already given, it may be added that the interior of the aperture is delicately coloured with a warm flesh tint.

Species 282. (Fig. *a* and *b*, Mus. Gubba.)

CONUS KIENERI. *Con. testâ subfusiformi-turbinatâ, basi subrecurvâ, lævigatâ, undique transversim sulcatâ, sulcis subdistantibus, pertusis, spirâ striato-sulcatâ; lividocinerascente, castaneo fasciatim interruptè variegatâ, floccis opaco-albis basin versus aspersâ, spirâ conspicuè castaneo maculatâ, aperturæ fauce livido-purpureâ.*

KIENER'S CONE. Shell somewhat fusiformly turbinated slightly recurved at the base, transversely grooved

throughout, grooves rather distant, pricked, spire striately grooved; livid ash colour, variegated in a banded interrupted style with chestnut, sprinkled towards the base with opake-white flakes, spire conspicuously spotted with chestnut, interior of the aperture livid purple.

Conus Nisus, Kiener, Icon. coq. viv. pl. 59. f. 4. (not of Chemnitz.)

Conus roseus, Kiener, Icon. coq. viv. pl. 107. f. 4. (not of Lamarck.)

Hab. ——?

I am much indebted to M. Gubba for the loan of the shells figured as above by M. Kiener, to whom I have the pleasure of dedicating the species. The essential specific characters of both shells are the same, and neither agrees with the *C. Nisus* of Chemnitz which represents the cærulescent variety of *C. cinerea.*

Species 283. (Mus. Cuming.)

Conus scitulus. *Con. testâ subtrigono-turbinatâ, lævi, basi subtiliter striato-sulcatâ, spirâ elevatiusculâ, tenui-sulcatâ; pallidè coccineâ, anfractuum margine albâ, radiis fuscis linearibus, medio albi-fasciatâ, punctis maculisque hieroglyphicis promiscuè pictâ.*

The trim Cone. Shell somewhat triangularly turbinated, smooth, finely striately grooved at the base, spire slightly raised, finely grooved; pale scarlet, upper edge of the whorls white, crossed with brown linear rays, white-banded in the middle, and promiscuously painted with dots and hieroglyphic spots.

Hab. ——?

It is difficult to describe the painting of this species, which is extremely characteristic, the white edge of the whorls being divided into compartments with brown radiated lines, as in many specimens of *C. Algoensis.*

NOTICE.

The author regrets to observe that at Supp. Pl. IV. the numbers of the species and figures were taken up fifty in arrear and so continued, Sp. 287 having been printed Sp. 237. The numbers on the plates agree throughout with the numbers in the text, but the species have been twice numbered 237 to 287 instead of 287 to 337.

CONUS.

To avoid any confusion arising out of certain errors committed in my own Monograph of this genus published in 1843, and in that subsequently published by M. Kiener in 1847, I have made a critical examination of each species. The following emendations resulting from this investigation have been aided principally by the greatly enlarged collection of Mr. Cuming, and that of M. Gubba of Havre, who has kindly furnished me with the means of examining many of M. Kiener's specimens.

Emendations applicable to the monographs of the CONCHOLOGIA ICONICA, *and* ICONOGRAPHIE DES COQUILLES VIVANTES.

C. ADAMSONI, Gray. Conch. Icon. pl. 4. f. 22.

This very beautiful species proves to have been first named in America, by M. Couthouy, *C. Rhododendron*, in the Annals Lyceum Nat. Hist. of New York, and figured in the Catalogue of Dr. Jay, an eminent conchologist of that city.

C. AMABILIS, Lamarck. Conch. Icon. pl. 11. sp. 57.

First described in 1795 by Chemnitz, at the close of his great work, Conch. Cab. vol. xi. pl. 182. f. 1770–1, under the name *C. festivus*. I cannot agree with M. Kiener in regarding it a variety of the *C. pertusus*, Hwass, described in 1792 by Bruguière in the Encyclopédie Méthodique.

C. AURANTIUS, Hwass. Conch. Icon. pl. 14. f. 73.

This species should take the name *C. leucostictus* first given to it by Gmelin, notwithstanding that the author confounded it afterwards with *C. ammiralis* as a variety.

C. CEYLONICUS, Chemnitz; vide *C. obesus*.

C. DILLWYNII, vide *C. piperatus*.

C. DUX, Hwass. Conch. Icon. pl. 3. f. 13.

First described by Born under the name *C. circumcisus*, accompanied by a reference to Martini (Conch. Cab. vol. ii. pl. 5. f. 571–2), whose figures were respectively named by Gmelin *C. affinis* and *lævis*.

C. ELONGATUS, Reeve, Conch. Icon. pl. 27. f. 157.

This name having been applied by Chemnitz to the *C. Mozambicus*, of which it has priority, I propose to call the species *C. oblitus*

C. ERMINEUS, Born; vide *C. lithoglyphus*.

C. FESTIVUS, Chemnitz; vide *C. amabilis*.

C. INFORMIS, Hwass. Conch. Icon. pl. 5. f. 24.

The observations of M. Deshayes, coupled with the figure pl. 337. f. 8, of the Encyclopédie Méthodique, go far to confirm an opinion I have long entertained, that this shell is truly a variety of the *C. elongatus*, Chemnitz (better known as *C. Mozambicus*). Neither of the figures to which Lamarck refers in the Conchylien Cabinet, apply to the species. The *C. spectrum Sumatræ* of Chemnitz I take to be a species collected during the voyage of the Samarang, to which the name *C. pica* has been given (Conch. Icon. Supp. pl. 9. f. 282).

C. JASPIDEUS, Kiener, Icon. coq. viv. pl. 55. f. 2. Conch. Icon. Supp. pl. 3. f. 281.

The above name cannot be retained for this species, having been already used by Gmelin in reference to Martini's figures, Conch. Cab. vol. ii. p. 55. f. 612 *a*, *b*, *c*, *d*, which, however, represent three species. The species under consideration is extremely variable in colour, and, notwithstanding the very different aspect of the figures, I am strongly inclined to regard it as a variety of *C. Loveni*, Krauss, Sudaf. Moll. pl. 6. f. 25.

C. LEUCOSTICTUS, Gmelin; vide *C. aurantius*.

C. LITHOGLYPHUS, Meuschen. Conch. Icon. pl. 4. f. 20.

M. Deshayes reminds us that this species was first described by Born under the name *C. ermineus*.

C. LORENZIANUS, Chemnitz. Conch. Icon. pl. 16. f. 87.

The shell here represented from M. Delessert's collection, the same figured in Kiener, Icon. coq. viv. pl. 55. f. 1, belongs to a well-known species which I propose to name *C. virgatus*, hitherto mistaken in this country for Lamarck's *C. zebra*. It is more attenuated towards the

base than *C. Lorenzianus*, according to Chemnitz, and never spotted round the base as in that figure, which I take to be a worn *C. flammeus*.

C. LOVENI, Krauss; vide *C. jaspideus*.

C. MAGUS, Linnæus. Conch. Icon. pl. 35. f. 190.

To this species may be added as synonymes the *C. Indicus tenellus*, *Circæ*, and *clandestinus* of Chemnitz. M. Deshayes considers the two last distinct, but I do not participate in this opinion.

C. MARTINIANUS, Reeve, Conch. Icon. Pl. 40. f. 217.

Described by Gmelin under the name *C. radiatus* to which it is strictly entitled.

C. MOZAMBICUS, Hwass. Conch. Icon. pl. 21. f. 118.

Lamarck should have adopted Chemnitz's name for this species, *C. elongatus*, when referring to his figure of it in the Conchylien Cabinet, as M. Deshayes has pointed out, and is the first to make the correction.

C. OBESUS, Hwass. Conch. Icon. pl. 7. f. 37.

The name *C. Ceylonicus*, Chemnitz, given as a synonyme of this species has priority of the above by four years. Unfortunately Bruguière described another in the Encyclopédie Méthodique named by M. Hwass, *C. Ceylanensis*, which though not literally alike, is the same in sense.

C. OBLITUS, vide *C. elongatus*.

C. PIPERATUS, Reeve, Conch. Icon. pl. 43. f. 230.

This name having been employed by Dillwyn, as explained under *C. punctatus*, I propose to name the species *C. Dillwynii* in honour of the author of the 'Descriptive Catalogue of Shells,' published in 1817, who is still living and in the enjoyment of good health. The synonymy of the last century was worked out by Dillwyn, with considerable pains.

C. PRÆFECTUS, Hwass. Conch. Icon. pl. 25. f. 138.

Described by Gmelin several years before the publication of the Encyclopédie Méthodique under the name *C. ochroleucus*.

C. PROTEUS, Hwass. Conch. Icon. pl. 40. f. 219.

The name given to this species in the Encyclopédie Méthodique must be cancelled in favour of *C. spurius* previously given to it by Gmelin.

C. PUNCTATUS, Hwass. Conch. Icon. pl. 24. f. 133.

Dillwyn, as we learn from M. Deshayes, proposed the name *C. piperatus* for this species, in consequence of Gmelin having used it in reference to the *C. augur* and *magus*, confounded together. As Gmelin employed the name *punctatus* in error, it is scarcely worth while to change the name of the species under consideration, but the name *piperatus* which I have applied to a new species at Pl. 43, must be altered;—vide *C. piperatus*.

C. RHODODENDRON, Couthouy; vide *C. Adamsoni*.

C. SINENSIS, Sowerby. Conch. Icon. pl. 15. f. 76.

This name being pre-occupied by Gmelin I propose to change it for *C. Sowerbii*

C. VIRGATUS, Reeve. *C. zebra*, Reeve (not of Lamarck), Conch. Icon. pl. 16. f. 87. *C. Lorenzianus*, Reeve. Kiener (not of Chemnitz).

The shell in M. Delessert's collection figured by M. Kiener (Icon. coq. viv. pl. 55. f. 1),and by myself (Conch. Icon. pl. 27. f. 152) is identical with the species figured in error (Conch. Icon. pl. 16. f. 87) for the *C. zebra*, which I now propose to name *C. virgatus*. It has been considered identical with the *C. Lorenzianus* of Chemnitz, (Conch. Cab. vol. xi. pl. 181. f. 1754–5), but I now agree with Lamarck, that the figure of the Conchylien Cabinet represents the *C. flammeus*; a worn specimen apparently, but distinguished by certain blotches of colour about the base, which are never present in *C. virgatus*. The name *Lorenzianus* has priority over *flammeus*.

C. ZEBRA, Lamarck. Kiener, Icon. coq. viv. pl. 76. f. 2.

We are indebted to M. Kiener, and the Lamarckian collection, for the information that the *C. zebra* of Lamarck is the shell regarded by me as a variety of the *C. stramineus* (Conch. Icon. pl. 42. f. 225 *a*); and the circumstance of Lamarck arranging the *C. zebra* next in order to the *C. stramineus* in his 'Anim. sans vert.,' is a strong indication of the view he entertained of their close affinity. For an account of the shell figured in Conch. Icon. pl. 16. f. 87, for the *C. zebra*, see *C. virgatus*.

Emendations applicable to the CONCHOLOGIA ICONICA *only.*

C. BARBADENSIS, Hwass. Conch. Icon. pl. 10. sp. 47.

The shell figured by Mr. Sowerby in his Conchological Illustrations, f. 105, and by myself at pl. 10, proves to be a worn specimen of *C. nebulosus*; but I doubt if the shell attributed to the *C. Barbadensis* in Paris, is anything more than a variety of *C. miliaris*.

C. BUXEUS, Reeve, Conch. Icon. pl. 47. p. 265.

This shell might be regarded a variety of *C. lignarius*,

as M. Kiener has remarked, but it is the same species afterwards described by him under the name *C. Cecilei.*

C. CASTUS, Reeve, Conch. Icon. pl. 47. f. 267.

This proves to be a very delicate lemon-yellow variety of *C. daucus*, in which species the faint necklaces of minute dots form a very characteristic feature.

C. GRUNERI, Reeve, Conch. Icon. pl. 43. f. 231.

I fear this is *C. literatus* in a very young state.

C. HYÆNA, Hwass. Conch. Icon. pl. 24. f. 133, *a, c.*

Having attributed a variety of *C. punctatus* to this species, the reader is referred to M. Kiener's interpretation of it (Conch. Icon. Supp. pl. 8. f. 274), as the best authority.

C. MOLUCCENSIS, Chemnitz; vide *C. Stainforthii.*

C. PRÆTEXTUS, Reeve. Conch. Icon. Supp. pl. 2. f. 277.

M. Kiener's name for this new species, *C. encaustus*, has priority of mine by a few months.

C. RADIATUS, Gmelin; vide *C. Martinianus.*

C. SOLANDRI, Brod and Sow. Conch. Icon. pl. 4. sp. 16.

First described by Gmelin with the name *C. coccineus.*

C. STAINFORTHII, Reeve. Conch. Icon. pl. 1. fig. 1.

This fine species, as M. Kiener has pointed out, proves to be the *C. Moluccensis*, Chemnitz, Conch. Cab. vol. xi. p. 63. pl. 183. f. 1780–1.

C. TIARATUS, Broderip, Pro. Zool. Soc. 1833. p. 52.

Conus minimus, var., Reeve, Conch. Icon. pl. 26.

This species differs little in form and colouring from *C. minimus* except in being designed in a more bold and striking manner, but as all the specimens collected by Mr. Cuming agree in this particular, I venture to withraw in favour of Mr. Broderip's opinion.

C. STRIGATUS, Hwass. Conch. Icon. pl. 45. f. 248.

M. Kiener assigns the *C. Australis* of Chemnitz to this species; if it be really so, the name *strigatus* has priority of the former by three or four years. It was not thus understood by Lamarck, who describes both species independently.

Emendations applicable to the ICONOGRAPHIE DES COQUILLES VIVANTES *only.*

C. ABBREVIATUS, Nuttall. Kiener, Icon. coq. viv. p. 45.

M. Kiener remarks under the head of *C. minimus*, that I have figured a very remarkable variety of that species with the name *C. abbreviatus.* This interesting species, collected by Mr. Nuttall at one of the Sandwich Islands, is of stouter growth and painted with isolated brown dots. It has no indication of the narrow articulated fillets which invariably characterize the *C. minimus*,

C. ALBIMACULATUS, Sowerby. Kiener, Icon. coq. viv. pl. 83. f. 2.

The shell which M. Kiener has taken for the *C. albimaculatus* is a dwarf yellowish-fawn variety of *C. Mindanus*, of which Mr. Cuming possesses specimens intermediate between it and the bright red type of the species. The *C. albimaculatus* has more resemblance with very young specimens of *C. lithoglyphus.*

C. AMBIGUUS, Reeve. Kiener, Icon. coq. viv. p. 130. pl. 70. f. 3.

I do not know the shell here described and figured; it is not the *C. ambiguus*, but a very excellent representation of that species appears at pl. 63, under the name *C. griseus.* Neither of the species figured bears any resemblance to the *C. Largilliertii*, as remarked by M. Kiener.

C. BRODERIPII, Reeve. Kiener, Icon. coq. viv. pl. 71. f. 2.

This is not the *C. Broderipii*, nor does it correspond with my figure of that species, of which the specimen in the British Museum is the only one known to me. M. Kiener's figure represents, to all appearance, an immature specimen of *C. Tinianus*, or *aurora.*

C. BRUGUIEREI, Kiener, Icon. coq. viv. pl. 56. f. 2.

I have always considered, with Bruguière, that this is a variety of his *C. Jamaicensis*, and see no reason to change that opinion. *C. Jamaicensis* has been regarded as a variety of *C. Mediterraneus*; it is a more swollen stouter shell, but the detail of pattern is the same.

C. CANDIDUS, Kiener, Icon. coq. viv. p. 214. pl. 97. f. 1.

The shell here described from M. Largilliert's collection, and for the sight of which I am indebted to M. Gubba, is a small discoloured specimen of the *C. monilifer.*

C. CARINATUS, Swainson. Kiener, Icon. coq. viv. p. 112.

M. Kiener presumes my *C. ustulatus*, Conch. Icon. pl. 44. f. 239, to be a variety of this shell. It is perfectly distinct. Mr. Cuming possesses three specimens of different sizes in the finest possible condition, collected by him at the Philippine Islands.

C. CASTANEUS, Kiener, *Icon. coq. viv. p. 209. pl. 104. f. 3.*

Having minutely examined this shell, in the collection of

M. Gubba, I have no hesitation in saying that it is a very highly coloured specimen of the *C. cingulatus*.

C. CECILEI, Kiener, Icon. coq. viv. pl. 98. f. 4. and pl. 107. f. 3.

This was first described by me as a new species under the name *C. buxeus*, but I now incline to regard it a variety of the *C. lignarius*.

C. CITRINUS, Kiener, Icon. coq. viv. pl. 59. f. 5. and pl. 78. f. 4.

The name *citrinus* was originally employed by Gmelin in reference to a figure of Martini, Conch. Cab. vol. ii. pl. 61. f. 681, which may or may not be *C. lividus*, young. Of the shells figured under this name by M. Kiener, one (pl. 59) appears to be a *C. Tinianus* or *aurora*, the other (pl. 78) is the young of a bright yellow variety of *C. vexillum*, already figured at pl. 66, of the same work under the name *C. sulphuratus*, and of which similar varieties occur in *C. Sumatrensis*.

C. CÆLEBS, Hinds. Kiener, Icon. coq. viv. pl. 51. f. 3.

M. Kiener has copied my figure of this shell, notwithstanding that I expressed my fears of its being only a young *C. terebellum* enveloped in its dark olive epidermis. Such it has proved to be.

C. COCCEUS, Reeve. Kiener, Icon. coq. viv. pl. 107.

The shells here figured represent the true *C. stramineus* of Lamarck. A pale specimen of *C. cocceus* is figured as a new species at pl. 89, under the name *C. decrepitus*.

C. COLUBRINUS, Lamarck. Kiener, Icon. coq. viv. pl. 82.

M. Kiener's figure of this species, which may be the true interpretation of it, represents a worn discoloured specimen of a variety of *C. canonicus*. The species regarded in this country as Lamarck's *C. colubrinus* is that which M. Kiener figures in the same plate as a variety of his *C. rubiginosus*.

C. CRETACEUS, Kiener, Icon. coq. viv. pl. 99. f. 1.

This shell, which I have carefully examined in the collection of M. Gubba of Havre, is a bleached specimen of the *C. Mindanus*.

C. DACTYLOSUS, Kiener, Icon. coq. viv. pl. 97. f. 2.

I have always regarded this shell, of which Mr. Cuming possesses specimens, as a minutely reticulated variety of the *C. clavus*, and see no reason to alter that opinion.

C. DECREPITUS, Kiener, Icon. coq. viv. pl. 99. f. 4.

This shell which I have examined in the collection of M. Gubba of Havre, is a faintly coloured specimen of my *C. cocceus*. The specimens figured by M. Kiener for that species at pl. 107, represent the type of Lamarck's *C. stramineus* in fine condition.

C. DUPONTII, Kiener, Icon. coq. viv. pl. 61. f. 2.

I have not seen this shell, but have little doubt of it being my *C. Grayi*, of which there are three specimens in the British Museum.

C. ERYTHRÆENSIS, Beck. Kiener, Icon. coq. viv. pl. 71.

This figure does not represent the species intended, which is invariably characterized by its very decided hieroglyphical spots, mostly flowing together in places so as to resemble bands. *C. puncticulatus* appears to be the species here represented; such varieties are not uncommon.

C. ECHINULATUS, Kiener, Icon. coq. viv. pl. 105. f. 2.

The shell figured under this name is a small white variety of the *C. verrucosus* of which Mr. Cuming possesses several specimens,

C. FLAVESCENS, Gray. Kiener, Icon. coq. viv. p. 196.

The specimen figured by M. Kiener under the above name at pl. 68, appears to be a *C. cardinalis*. The species is correctly illustrated at pl. 92 of the same work. It has no relation with the *C. emarginatus*.

C. EXARATUS, Reeve. Kiener, Icon. coq. viv. pl. 72. f. 6.

This is not *C. exaratus*; the figure here intended to illustrate that species represents a well-known dwarf variety of *C. interruptus*.

C. FULMEN, Reeve. *C. testudinarius var.*, Kiener.

M. Kiener regards this species a variety of *C. testudinarius*. Mr. Cuming collected several specimens similarly marked at the Philippine Islands, whilst the *C. testudinarius* is from the Cape de Verd Islands.

C. FUMIGATUS, Hwass. Kiener, Icon. coq. viv. f. 104.

In speaking of the characters of this species, M. Kiener observes that *C. incarnatus* and *Orion* are varieties. Mr. Cuming possesses specimens of all three species in different stages of growth, which show they are totally distinct.

C. GABRIELII, Kiener, Icon. coq. viv. pl. 74. f. 4.

This is the *C. cinereus* in fine condition, of which species M. Kiener's figures at pl. 46, are not very characteristic.

C. GRANARIUS, Kiener, Icon. coq. viv. pl. 98. f. 1.

This beautiful shell, which through the kindness of M. Gubba I have had an opportunity of examining, is a fine *C. archon*, similar to that figured by M. Kiener at pl. 75. f. 3, approaching hard on *C. cedo-nulli*, into which species there is an easy transition.

C. GRISEUS, Kiener, Icon. coq. viv. p. 114. pl. 63. f. 2.

The shell here figured represents the true *C. ambiguus*, Conch. Icon. pl. 33. sp. 244, of which specimens are now known in good condition. I cannot offer any opinion on

the shell figured by M. Kiener for *C. ambiguus* at pl. 70, except that it is not the species intended.

C. GUBBA, Kiener, Icon. coq. viv. pl. 104. f. 1.

This is a very dark variety of *C. Bernardi*, distinguished by a few small light patches characteristic of that species.

C. HIEROGLYPHICUS, Duclos. Kiener, Icon. coq. viv. p. 181.

M. Kiener has correctly illustrated this species at pl. 73, finely granulated and violet-coloured in the aperture, but the shell figured as a variety of it at pl. 103, is quite another thing. Mr. Cuming has recently obtained a specimen; I have also examined two specimens in the collection of Mr. Gubba of Havre, and propose to name it *C. lugubris*, Conch. Icon. Supp. pl. 9. sp. 280.

C. INSCRIPTUS, Reeve. Kiener, Icon. coq. viv. pl. 105. f. 3.

This is not my *C. inscriptus*, nor does it resemble my figure of that very characteristic species either in form or in marking. I have not seen the shell here represented which may be, probably, *C. Guinaicus*.

C. INFLATUS, Sowerby. Kiener, Icon. coq. viv. pl. 71. f. 3.

The figure which M. Kiener gives under this name has no resemblance with Mr. Sowerby's, and is apparently *C. Tinianus*. I can neither identify Mr. Sowerby's figure nor obtain any information of the species.

C. LOROISII, Kiener, Icon. coq. viv. pl. 65. f. 1.

I cannot regard this shell, which is very well-known to me, to be anything more than a variety of the *C. figulinus*.

C. MAGDELENÆ, Kiener, Icon. coq. viv. pl. 69. f. 4.

This shell I have not had an opportunity of examining, but the figure is manifestly one of *C. floccatus*.

C. MAHOGANI, Reeve. Kiener, Icon. coq. viv. p. 171.

M. Kiener remarks that this species approximates to the *C. zebra* and is also allied to the *C. interruptus*. Of the latter I fear it may be a variety, but it has little or no relation with the former.

C. MAURITIANUS, Lamarck, Enc. Méth. pl. 330. f. 9.
Kiener, Icon. coq. viv. pl. 69. f. 2.

It is extremely probable that this species has been founded upon a variety of *C. puncticulatus*.

C. MIGHELSI, Kiener, Icon. coq. viv. pl. 103. f. 1.

This shell I have not seen, but there can be little doubt of its being a richly coloured variety of *C. musicus*, of which Mr. Cuming possesses specimens.

C. NEPTUNUS, Kiener, Icon. coq. viv. p. 133.

It is much to be regretted that M. Kiener does not pay us an occasional visit, in order to make himself acquainted with the many species described in this country of which there are no specimens on the continent. In attempting to illustrate the *C. Neptunus*, an extremely characteristic species, and one of the unique gems of the Cumingian collection, M. Kiener has figured, at pl. 92 of his work, a worn *C. acuminatus*; with a view to correct this he has figured, at pl. 99, a small specimen of a well-known variety of the *C. Amadis;* and in dilating upon its specific character, he compares it with the *C. generalis* with which it has no affinity whatever.

C. NODIFERUS, Kiener, Icon. coq. viv. pl. 100. f. 4.

I have not had an opportunity of seeing this shell, but I doubt if it is anything more than a fine specimen of the *C. verrucosus*.

C. NISUS, Chemnitz. Kiener, Icon. coq. viv. pl. 59. f. 4.

This is not the *C. Nisus* but a new species, of which a variety is figured at Pl. 107, under the name *roseus*, already occupied by Lamarck. Chemnitz' *C. Nisus* appears to be a *C. cinereus* (var. *C. cærulescens*). The species under consideration, of which I have examined M. Kiener's specimens, I propose to name *C. Kieneri*, Conch. Icon. Supp. pl. 9. f. 283.

C. NUX. Brod. Kiener, Icon. coq. viv.

To this species, M. Kiener remarks, may be referred the *C. nanus* and *maculiferus* as varieties. Respecting the first of these it may be somewhat a matter of opinion, but the last is a totally different shell, of much lighter growth and of a different design of painting.

C. PANNICULUS, Lamarck. Kiener, Icon. coq. viv. pl. 87.

M. Kiener gives a very different interpretation of this species from that which we have regarded to be the true one, and of which there is no representation in his monograph. The figure under consideration is the true *C. abbas* and perfectly agrees with the illustration of that species in the preceding plate.

C. PARIUS, Reeve. Kiener, Icon. coq. viv. pl. 60.

M. Kiener has correctly illustrated this species at pl. 60. The shell figured as a variety of it at pl. 103, is a new species of which Mr. Cuming possesses several specimens; *C. collitus*, Supp. pl. 8. f. 273.

C. PASTINACA, Lamarck. Kiener, Icon. coq. viv. pl. 26.

This is not the shell which I take to be the *C. pastinaca*, of which there are two specimens in the British Museum in fine fresh condition, one partially covered with a thick fibrous epidermis.

C. PUSILLUS, Chemnitz. Kiener, Icon. coq. viv. pl. 43.

The shell here figured appears to be a dwarf variety of the *C. catus* or *interruptus*. The species is correctly illustrated at pl. 55, f. 7. M. Kiener has noticed this error.

C. PUSTULATUS, Kiener, Icon. coq. viv. pl. 101. f. 2.

Having examined this shell in the collection of M. Gubba, I find it to be a small dark variety of M. Kiener's *C. papillosus*, represented at pl. 72. f. 4.

C. REEVEI, Kiener, Icon. coq. viv. pl. 44. f. 2.

This shell, to which M. Kiener his paid me the compliment of attaching my name, is, I fear, a variety of *C. Senator*. It is certainly not my *C. punctatus*, var.

C. ROSEUS, Kiener, (not of Lamarck). Icon. coq. viv. pl. 107. f. 4.

The name *roseus* being not only an inappropriate one for this species, but already occupied by Lamarck, I propose to name it after the author of the Iconographie, *C. Kieneri*. The shell figured by M. Kiener at pl. 59, f. 4. for *C. Nisus* of Chemnitz is another variety of the same. Through the kindness of M. Gubba I am able to figure both these specimens at Supp. pl. 9. sp. 283, *a* and *b*.

C. ROSEUS, Lamarck. Kiener, Icon. coq. viv.

M. Kiener states that I have figured a *C. lividus* for the *C. roseus*, but a comparison of our figures will show that the species was perfectly well known to me. The specimen represented in the Conchologia Iconica is not in such good condition as that of the Iconographie coq. viv., but it is a true example of the species.

C. SCALARIS, Valenciennes. Kiener, Icon. coq. viv. pl. 88.

This species I have not seen, but the figure is so like the fusiform variety of *C. acutangulus* that I cannot forbear suggesting the comparison.

C. SINENSIS, Sowerby. Kiener, Icon. coq. viv. p. 143. pl. 71. f. 1.

M. Kiener arranges the *C. Sinensis* next in order to the *C. cingulatus*, with the remark that the species ought to be united in one. The shell described and figured is not the *C. Sinensis*, but truly a rather sharply acuminated specimen of *C. cingulatus*. The name *C. Sinensis* having been used by Gmelin, I propose to change it, in reference to the present species, for *C. Sowerbii*.

C. SPHACELATUS, Sow. Kiener, Icon. coq. viv. p. 17.

M. Kiener remarks, in his observations on *C. nebulosus*, that Mr. Sowerby's *C. sphacelatus* is merely a young individual of that species. It is quite distinct.

C. STELLATUS, Kiener, Icon. coq. viv. pl. 99. f. 3.

I believe this to be the young or dwarf state of M. Kiener's *C. Elisæ*, both of which I have examined and figured at Supp. pl. 8. f. 275.

C. STRIATUS, var. Kiener, Icon. coq. viv. pl. 47. f. 1, *b*.

This shell is a well-known variety of the *C. gubernator*.

C. SUBULATUS, Kiener, Icon. coq. viv. pl. 92. f. 6.

This figure appears to represent a variety of the *C. aculeiformis*. Should it prove to be a new species the above name cannot be retained, as M. Kiener has already used it in reference to another species at pl. 70.

C. SULPHURATUS, Kiener, Icon. coq. viv. p. 130. pl. 66.

This shell figured by M. Kiener under the above name at pl. 66 of his work, and again under the name *C. citrinus* at pl. 78, is the young of a well-known bright yellow variety of *C. vexillum*. Mr. Sowerby figured it in his Illustrations as the young of *C. mustelinus*.

C. TABIDUS, Reeve. Kiener, Icon. coq. viv. pl. 66. f. 2.

The shell here figured appears to be a *C. mus*; it is certainly not my *C. tabidus*, in Mr. Cuming's collection.

C. TERMINUS, Lamarck. Kiener, Icon. coq. viv. pl. 48.

M. Kiener introduces this species as a synonyme of *C. gubernator*. The shell upon which this observation is founded, represented at f. 1 *d*, is truly a *C. gubernator*. The *C. terminus* is quite another species, though very similar in general aspect. It appears to be little known on the continent.

C. TORNATUS, Kiener, Icon. coq. viv. pl. 59. f. 5.

This shell is not the species intended, but a *C. interruptus*. *C. tornatus* is very closely allied to *C. interruptus*, but a different type from the one here represented.

C. VENULATUS, Hwass. Kiener, Icon. coq. viv. p. 183. pl. 69. f. 1.

The well-known *C. nivosus* of Lamarck has been hitherto attributed to this species, and I doubt if M. Kiener's figure gives a better interpretation. It looks as if it were copied from another figure or from a specimen in bad condition.

C. VERREUXII, Kiener, Icon. coq. viv. pl. 60. f. 5.

This species is my *C. conspersus*, of which M. Kiener has copied at Pl. 88. f. 2, the figure in Conch. Icon. taken at the time from an indifferent specimen, the only one known to me, received from M. Gruner of Bremen. For an illustration of this species in fine state, see Conch. Icon. Supp. pl. 9.

C. UNDATUS, Kiener, Icon. coq. viv. p. 142. pl. 93. f. 2.

This shell is certainly a variety of *C. cingulatus*, though differing in general aspect from that which M. Kiener figures at Pl. 93. f. 2, as the type of the species. His *C. castaneus* is another variety.

C. VOLUMINALIS, Hinds. Kiener, Icon. coq. viv. pl. 71.

The shell here represented is not the species intended, nor is the *C. voluminalis* at all like the *C. Proteus*. This figure has the appearance of a pale *C. stramineus*.

Emendations applicable to M. Deshayes' notes in ANIMAUX SANS VERTEBRES.

C. AUGUR, Hwass. Conch. Icon. pl. 2. f. 7.

I do not think, with M. Deshayes, that this name should be abandoned in favour of *C. punctatus*, under which head Gmelin confounded *C. augur* and *magus* together.

C. FUMIGATUS, Hwass. Anim. sans vert. vol. xi. p. 86.

According to the synonymy of Dillwyn and Lamarck, this species is entitled to the name *C. coffea*, given to it by Gmelin, but the figure in Martini, Conch. Cab. vol. ii. pl. 56. f. 618, to which that author refers, is an extremely doubtful one.

C. LIVIDUS, Hwass. Conch. Icon. pl. 38. f. 211.

M. Deshayes states (Anim. sans vert. vol. xi. p. 31, note) that this species was first established by Gmelin under the name *C. citrinus*. The figure in Martini upon which it is founded is a very obscure one, and may or may not be a *C. lividus*, whilst an undoubted figure of *C. lividus* is referred to by the same author to illustrate var. *b*, of *C. rusticus*, which is *C. cinerea*.

C. NEBULOSUS, Solander. Conch. Icon. pl. 10. f. 51.

M. Deshayes says, "It is certain that this species was first named by Gmelin *C. leucostictus*." It is the *C. aurantius* of the Encyclopédie Méthodique to which Gmelin applied that name, as may be seen on reference to the excellent figures of Martini and Gualter, to which he refers.

CONUS.

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auricomus, Lamarck	XXXVI.	196
aurisiacus, *Linnæus*	V.	29
aurora, *Lamarck*	XII.	62
australis, *Chemnitz*	IV.	19
bæticus, *Reeve*	XLII.	226
balteatus, *Sowerby*	XVI.	88
Bandanus, *Hwass*	VIII.	43
Barbadensis (?), *Hwass*	X.	47
betulinus, *Linnæus*	XIII.	67
Broderipii, *Reeve*	XLVI.	254
brunneus, *Wood*	XIV.	72
bulbus, *Reeve*	XXX.	169
bullatus, *Linnæus*	XVII.	93
buxeus, *Reeve*	XLVII.	265
cœlebs, *Hinds*	XIII.	64
cærulescens, Lamarck	XLI.	220
Caledonicus, *Hwass*	XXXIII.	181
Californicus, *Hinds*	XLII.	224
canaliculatus, Chemnitz	X.	49
cancellatus, *Lamarck*	XXX.	171
canonicus, *Hwass*	XXIX.	165
capitaneus, *Linnæus*	XI.	54
cardinalis, *Hwass*	XVIII.	102
carinatus, *Swainson*	XXXI.	175
castus, *Reeve*	XLVII.	267
catus, *Hwass*	XV.	79
cedo-nulli, *Klein*	IX.	46
centurio, *Born*	IV. & XXVIII.	21
cervus, *Lamarck*	XXII.	124
cervus, Sowerby	V.	28
Ceylanensis, *Hwass*	XXXVII.	199
Ceylonicus, Chemnitz	VII.	37
characteristicus, *Chemnitz*	XXIX.	167
cinctus, Swainson	XXIII.	53
cinereus, *Hwass*	XLI.	220
cingulatus, *Lamarck*	XXVII.	158
cingulatus, Sowerby	IV.	22
classiarius, *Hwass*	XXXIII.	180
clavus, *Linnæus*	XXXVI.	194
Clerii, *Reeve*	XLIII.	229
cocceus, *Reeve*	XLII.	228
colubrinus, *Lamarck*	XXII.	123
columba, *Hwass*	XVIII.	97
concinnus, *Broderip*	XXVII.	153
concolor, *Sowerby*	XLIV.	242
consors, *Sowerby*	XXI.	121
conspersus, *Reeve*	XLVII.	262
costatus, Chemnitz	XVIII.	99
crepusculum, *Reeve*	XLV.	251
crocatus, *Lamarck*	I.	6
cuneolus, *Reeve*	XXXVII.	205
cylindraceus, *Broderip*	XVI.	84
daucus, *Hwass*	XX.	114
Delessertianus, *Recluz*	XXXIX.	213
Deshayesii, *Reeve*	V.	28
distans, *Hwass*	XXXI.	174
dux, *Hwass*	III.	13
eburneus, *Hwass*	XIX.	106
elongatus, *Reeve*	XXVII.	157

	Plate	Species
Elventinus, Duclos	XX.	115
emarginatus, *Reeve*	XLIII.	232
episcopus, *Lamarck*	XXXIV.	189
epistomium, *Reeve*	XLII.	227
erythræensis, *Beck*	XXIV.	137
exaratus, *Reeve*	XLIV.	238
fabula, *Sowerby*	XXVI.	147
ferrugineus, Hwass	XXXVI.	197
figulinus, *Linnæus*	XXVIII.	160
flammeus, Lamarck	XXVII.	152
flavescens, *Gray*	XXX.	168
flavidus, *Lamarck*	XXXVIII.	207
floccatus, *Sowerby*	III.	14
Franciscanus, *Hwass*	XXXIX.	216
fulmen, *Reeve*	XXXIX.	215
fumigatus, *Hwass*	XXIV.	135
furvus, *Reeve*	XIII. & XL.	69
fuscatus, *Born*	XXXIII.	184
fusiatus, Hwass	XVII.	94
generalis, *Linnæus*	X.	48
genuanus, *Linnæus*	XV.	81
geographus, *Linnæus*	XXIII.	130
gladiator, *Broderip*	XXII.	127
glans, *Hwass*	XXVI.	145
glaucus, *Linnæus*	II.	10
gloria-maris, *Chemnitz*	VI. & *Vignette*.	31
gradatus, *Gray*	XXV.	140
granulatus, *Linnæus*	V.	27
granulatus, Martini	XXXVII.	201
Grayi, *Reeve*	XLVI.	258
Grüneri, *Reeve*	XLIII.	231
gubernator, *Hwass*	XII.	59
Guinaicus, *Hwass*	XXXIV.	187
Hebræus, *Linnæus*	XIX.	104
hieroglyphicus, *Duclos*	XVIII.	101
hyæna, Hwass	XXIV.	133
imperialis, *Linnæus*	XII.	60
incarnatus, *Reeve*	XLI.	221
informis, *Hwass*	V.	24
inscriptus, *Reeve*	XXIX.	164
intermedius, *Reeve*	XXIII.	129
interruptus, *Broderip*	XXII.	125
interruptus, Wood	XLI.	58
iodostoma, *Reeve*	XXVIII.	159
Jamaicensis, Lamarck	XVI.	89
Janus, *Hwass*	VI.	33
lacteus, *Lamarck*	XLIII.	234
lapidius, Chemnitz	I.	4
lautus, *Reeve*	XLVI.	255
legatus, *Lamarck*	XVI.	85
lentiginosus, *Reeve*	XLIV.	245
leoninus, *Hwass*	V.	26
lignarius, *Reeve*	XXIV.	136
lineatus, *Chemnitz*	XXIII.	131
liratus, *Reeve*	XLVII.	268
literatus, *Linnæus*	XXXIII.	183
lithoglyphus, *Meuschen*	IV.	20
lividus, *Hwass*	XXXVIII.	211
lividus, Chemnitz	XLI.	220
Lorenzianus, *Chemnitz*	XXVII.	152
lucidus, Wood	XI.	52
luteus, *Broderip*	XVII.	91
maculiferus, *Sowerby*	XVIII.	95
maculosus, Sowerby	XXV.	139
Madurensis (?), *Hwass*	XLIV.	237
magnificus, *Reeve*	VI.	32
magus, *Linnæus*	XXXV.	190
mahogani, *Reeve*	XXII.	126
Malaccanus, *Hwass*	X.	49
Maldivus, *Hwass*	XXXIII.	185
marchionatus, *Hinds*	XIII.	65
marmoreus, *Linnæus*	XIV.	74
Martinianus, *Reeve*	XL.	217
Mediterraneus, *Hwass*	XVI.	89
melancholicus, *Lamarck*	XXI.	117
mercator, *Linnæus*	XVI.	83
Metcalfii, *Reeve*	XXXVI.	192
miles, *Linnæus*	II.	9
miliaris, *Hwass*	XXXVI.	198
millepunctatus, Chemnitz	XX.	116
millepunctatus, *Lamarck*	XXXII.	178
Mindanus, *Hwass*	XX.	115
minimus, *Linnæus*	XXVI.	143
minutus, *Reeve*	XLVII.	259
mitratus, *Hwass*	XVIII.	100
modestus, Sowerby	XLI.	220
monachus, *Linnæus*	XXII.	122
monile, *Hwass*	XII.	61
monilifer, *Broderip*	XXVI.	144
Mozambicus, *Hwass*	XXI.	118
mucronatus, *Reeve*	XXXVII.	204
muriculatus, *Sowerby*	XX.	112
mus, *Hwass*	XIX.	103
muscosus, Lamarck	XXIX.	167
musicus, *Hwass*	XX.	113
musivum, Broderip	XVI.	85
mustelinus, *Hwass*	VI.	34
mutabilis, *Chemnitz*	XLV.	249
nanus, *Broderip*	XXVII.	150
Narcissus, *Lamarck*	XXVII.	155
nebulosus, *Solander*	X.	51
Nemocanus, *Hwass*	XXVIII.	161
Neptunus, *Reeve*	VI.	30
Nicobaricus, *Hwass*	VIII.	41
nimbosus, *Hwass*	XIII.	66
nitidus, *Reeve*	XLVII.	266

	Plate	Species
nivifer, Broderip	XXXVI.	195
nivosus, Lamarck	XXXVI.	195
nobilis, *Linnæus*	I.	2
nocturnus, *Hwass*	VIII.	42
Nussatella, *Linnæus*	XI.	56
nux, *Broderip*	XX.	110
obesus, *Hwass*	VII.	37
obscurus, *Humphreys*	XVI.	82
ochroleucus, Gmelin	XXV.	138
Omaicus, *Hwass*	X.	50
omaria, *Hwass*	XXXII.	177
Orbignyi, *Ardouin*	IV.	17
orbitatus, *Reeve*	XXVII.	156
Orion, *Broderip*	XXV.	142
pagodus, Chenu	XXX.	171
panniculus, *Lamarck*	XXXI.	176
papilionaceus, *Hwass*	XXXIV.	188
Parius, *Reeve*	XLIII.	235
pastinaca, *Lamarck*	XLVI.	257
patricius, *Hinds*	XIII.	63
pauperculus, *Sowerby*	XX.	108
pellis-hyænæ, Chemnitz	XXIV.	133
pennaceus, Lamarck	XXXII.	177
pertusus, *Hwass*	V.	25
pictus, *Reeve*	XVIII.	98
piperatus, *Reeve*	XLIII.	230
planicostatus, Sowerby	IV.	17
planorbis, Born	XXXVI.	197
plumbeus, *Reeve*	XLVI.	253
polyzonias, Gmelin	XXXVI.	197
pontificalis, *Lamarck*	IV.	15
Porto-Ricanus, *Hwass*	XXXIX.	212
præfectus, *Hwass*	XXV.	138
prælatus, *Hwass*	XXI.	120
princeps, *Linnæus*	VII.	36
Prometheus, *Hwass*	XXX.	172
Proteus, *Hwass*	XL.	219
pseudo-Thomæ, Chemnitz	XL.	219
pulchellus, Sowerby	XLI.	58
pulchellus, *Swainson*	XI. & XXIII.	53
pulicarius, *Hwass*	XVII.	94
punctatus, *Chemnitz*	XXIV.	133
puncticulatus, *Hwass*	XX.	116
puncturatus, *Hwass*	XLVII.	261
purpurascens, *Broderip*	XIX.	105
pusillus, *Chemnitz*	XXVII.	154
pusio, Lamarck	XVI.	89
pygmæus, *Reeve*	XLVII.	260
pyriformis, *Reeve*?	XIII.	70
quæstor, Lamarck	XXIX.	167
quercinus, *Hwass*	XXVI.	148
radiatus, Chenu	XXXVII.	203
ranunculus, Lamarck	XXXV.	191
raphanus, Hwass	XXXV.	190
rattus, Lamarck	XV.	78
regalitatis, *Sowerby*	XL.	218
regius, Chemnitz	VII.	36
regularis, *Sowerby*	XXVI.	146
reticulatus, *Sowerby*	XI.	52
rosaceus, Chemnitz	XII.	62
roseus, *Lamarck*	XXXIII.	186
rubiginosus, Lamarck	XXXII.	177
rusticus, Linnæus	XLI.	220
rutilus, *Menke*	XLVII.	264
St. Thomæ, Chemnitz	X.	50
scalptus, *Reeve*	XXXVII.	203
Senator, *Linnæus*	XXXVI.	197
Siamensis, *Hwass*	XXIX.	166
sindon, *Reeve*	XLIII.	233
Sinensis, *Sowerby*	XV.	76
Solandri, *Broderip*	IV.	16
solidus, *Sowerby*	V.	23
spectrum, *Linnæus*	XV.	80
sphacelatus, *Sowerby*	XVIII.	96
splendidulus, *Sowerby*	VII.	40
sponsalis, *Chemnitz*	XX.	109
Stainforthii, *Reeve*	I.	1
stercus-muscarum, *Linnæus*	XVII.	90
stramineus, *Lamarck*	XLII.	225
striatus, *Linnæus*	XXXII.	179
strigatus (?), *Lamarck*	XLV.	248
sugillatus, *Reeve*	XLV.	247
sulcatus, *Hwass*	XVIII.	99
Sumatrensis, *Lamarck*	III.	12
Suratensis, *Hwass*	IV.	18
suturatus, *Reeve*	XLV.	250
tabidus, *Reeve*	XLIV.	243
tæniatus, *Hwass*	XIX.	107
Taheitensis, *Hwass*	XV.	78
tendineus, *Hwass*	XI.	55
terebellum, *Martini*	VII.	38
terebra, Born	VII.	38
terebra, Chemnitz	XI.	56
terminus, *Lamarck*	VII.	39
tessellatus, *Born*	XXVIII.	163
testudinarius, *Martini*	XXXIX.	214
textile, *Linnæus*	XXXVIII.	209
thalassiarchus, *Gray*	II.	8
tiaratus, Broderip	XXVI.	143
Timorensis, *Hwass*	XX.	111
Tinianus, *Hwass*	XLIII.	236
tornatus, *Broderip*	XIII.	68
tristis, *Reeve*	XLV.	252
trochulus, *Reeve*	XLV.	246
tulipa, *Lamarck*	XXIII.	128
ustulatus, *Reeve*	XLIV.	239

	Plate	Species
varius, *Linnæus*	XII. & XLI.	58
venulatus, *Hwass*	XXXVI.	195
vermiculatus, Lamarck	XIX.	104
verriculum, *Reeve*	XXXVIII.	208
verrucosus, *Lamarck*	XXXVII.	201
vespertinus, Humphreys	XX.	111
vexillum, *Martini*	I.	3
vicarius, *Lamarck*	XXXVIII.	210
victor, *Broderip*	I.	5
Victoriæ, *Reeve*	XXXVII.	202
vidua, *Reeve*	VIII.	45
violaceus, *Reeve*	XLIV.	241
virgo, *Linnæus*	XXI.	119
viridulus, *Lamarck*	XXXIII.	182
vittatus, *Lamarck*	XIV.	75
vitulinus, *Hwass*	XXIII.	132
voluminalis, *Hinds*	XXXVII.	206
vulpinus, Hwass	XXXVI.	197
zebra, *Lamarck*	XVI.	87
zonatus, *Hwass*	I.	4

Critical Analysis of Species rejected.

C. alveolus, *Sowerby* (C. Illus.), is C. stramineus.
C. asper, *Lamarck* (Anim. sans vert.), is C. sulcatus.
C. aspersus, *Sowerby* (Conch. Illus.), is C. testudinarius.
C. auricomus, *Hwass* (Enc. Méth.), is C. clavus.
C. auricomus, *Lamarck* (Anim. sans vert.), is C. aureus.
C. bicolor, *Sowerby* (Conch. Illus.), is C. Proteus.
C. castrensis, *Gould* (Pro. Bost. N. H. S.), unknown to me.
C. cærulescens, *Lamarck* (Anim. s. v.), is C. cinereus, var.
C. cervus, *Sowerby* (Conch. Illus.), is C. Deshayesii.
C. cinctus, *Swainson* (Zool. Illus.), is C. pulchellus, var.
C. cingulatus, *Sowerby* (App. Tank. Cat.), is C. Adamsoni.
C. discrepans, *Sowerby* (Conch. Illus.), unknown to me.
C. dispar, *Sowerby* (Conch. Illus.), unknown to me.
C. Elventinus, *Duclos* (Mag. de Zool.), is C. Mindanus.
C. eques, *Lamarck* (Anim. sans vert.), unknown to me.
C. ferrugatus, *Sowerby* (Pro. Z. S.), is C. cingulatus, var.
C. ferrugineus, *Hwass* (Enc. Méth.), is C. Senator, var.
C. flammeus, *Lamarck* (Anim. s. v.), is C. Lorenzianus.
C. fulgetrum, *Sowerby* (Conch. Illus.), unknown to me.
C. fulgurans, *Lamarck* (Anim. s. v.), unknown to me.
C. fusiformis, *Lamarck* (Anim. s. v.), unknown to me.
C. fustigatus, *Lamarck* (Anim. s. v.), is C. pulicarius, var.
C. hyæna, *Hwass* (Enc. Méth.), is C. punctatus, var.
C. inflatus, *Sowerby* (Conch. Illus.), unknown to me.
C. interruptus, *Wood* (Ind. Test. Supp.), is C. varius, var.
C. Jamaicensis, *Lamarck* (Anim. s. v.), is C. Mediterraneus.
C. Japonicus, *Lamarck* (Anim. s. v.), unknown to me.
C. lamellosus, *Lamarck* (Anim. s. v.), unknown to me.
C. lucidus, *Wood* (Ind. Test. Supp.), is C. reticulatus.
C. Luzonicus, *Sowerby* (C. Illus.), is C. regalitatis, var.
C. Luzonicus, *Lamarck* (Anim. s. v.), unknown to me.
C. maculosus, *Sowerby* (C. Illus.), is C. anemone, var.
C. Mauritianus, *Hwass* (Enc. Méth.), unknown to me.
C. maurus, *Gray* (App. King's Australia), unknown to me.
C. modestus, *Sowerby* (Conch. Illus.), is C. cinereus, var.
C. muscosus, *Lamarck*, is C. characteristicus, young.
C. musivum, *Broderip* (Pro. Zool. Soc.), is C. legatus.
C. nivifer, *Broderip* (Pro. Z. S.), is C. venulatus, var.
C. nivosus, *Lamarck* (Anim. s. v.), is C. venulatus, var.
C. ochraceus, *Lamarck* (A. s. v.), is C. Proteus discoloured.
C. pennaceus, *Lamarck* (Anim. s. v.), is C. omaria, var.
C. planicostatus, *Sowerby* (Conch. Ill.), is C. Orbignyi.
C. pulchellus, *Sowerby* (Pro. Z. S.), is C. varius, var.
C. pusillus, *Lamarck* (Anim. s. v.), unknown to me.
C. pusio, *Lamarck* (Anim. s. v.), is C. Mediterraneus, var.
C. pyramidalis, *Lamarck* (Anim. s. v.), unknown to me.
C. quæstor, *Lamarck* (Anim. s. v.), is C. characteristicus.
C. ranunculus, *Lamarck*, is C. achatinus granulated.
C. raphanus, *Hwass* (Enc. Méth.), is C. magus, var.
C. rattus, *Lamarck* (Anim. s. v.), is C. Taheitensis, var.
C. regius, *Chemnitz* (Conchylien Cab.), is C. princeps.
C. recurvus, *Broderip* (Pro. Z. S.), is C. cingulatus.
C. rubiginosus, *Lamarck* (Anim. s. v.), is C. omaria, var.
C. Sinensis, *Chenu* (Recueil de coq.), unknown to me.
C. tiaratus, *Broderip* (Pro. Z. S.), is C. minimus, var.
C. unicolor, *Sowerby* (Conch. Illus.), unknown to me.
C. vermiculatus, *Lamarck* (An. s. v.), is C. Hebræus, var.
C. verulosus, *Lamarck* (An. s. v.), is C. granulatus, bad.
C. vespertinus, *Humphreys* (Tank. Cat.), is C. Timorensis.
C. vulpinus, *Hwass* (Enc. Méth.), is C. Senator.
C. ximenes, *Gray* (Zool. Beech. voy.), unknown to me.

ERRATUM.

Species 234.—CONUS LACTEUS. *Instead of* REEVE, Pro. Zool. Soc., 1843, *read* LAMARCK, Anim. sans vert., vol. vii. p. 481.

MONOGRAPH

OF THE GENUS

PLEUROTOMA.

"In India East or West, or middle shore,
In Pontus or the Punic coast, or where
Alcinous reigned, * * *
She gathers tribute large, and on the board
Heaps with unsparing hand."—*Milton.*

1
2
3
4a
5
4b
6a
7
6b

PLEUROTOMA.

PLATE I.

Genus PLEUROTOMA, Lamarck.

Testa turrita, fusiformis, spirâ acuminatâ; columellâ lævi, in canalem rectum nunc elongatum, nunc breviusculum, desinente; aperturâ ovali, labro simplici, acuto, posticè sinu fissuráve emarginato. Operculum corneum, infrà acuminatum.

Shell turrited, fusiform, spire acuminated; columella smooth, ending in a straight canal, varying considerably in length; aperture oval; lip simple and acute, emarginated at or near its junction with the last whorl with either a slit or fissure. Cperculum horny, acuminated at the lower end.

The Pleurotomæ were separated by Lamarck from the fusiform portion of the Linnæan *Murices*, originally distinguished by Bruguière with the title of *Fusus*. The labral slit or sinus which has been selected to characterize this genus is a never-failing mark of distinction, for after an examination of nearly two hundred species now before me, exhibiting this peculiarity in every conceivable variety of form, I come to the conclusion that the genera into which some authors have thought it expedient to distribute them (*Clavatula, Drillia, Melatoma, Perronia*, e. g.) might be profitably dispensed with.

Species 1. (Mus. Stainforth.)

PLEUROTOMA CINGULIFERA. *Pleur. testâ turrito-subulatâ, transversim striatâ, sulcatâ et cingulatâ; anfractibus convexiusculis, prope suturas cingulo unico circumvallatis; cingulo maculis quadratis rufis picto; canali brevi, recurvo; labro margine scabro.*

THE GIRDLED PLEUROTOMA. Shell turrited, acuminated, transversely striated, grooved and belted; whorls rather convex, surrounded with a single girdle or belt near the sutures, painted with square reddish spots; canal short and recurved; lip rather rough at the edge.

LAMARCK, Anim. sans vert., vol. vii. p. 94.

KIENER, Iconographie, pl. 17. f. 1.

Hab. Coast of Madagascar, Red Sea, Philippines, &c.

The belt or girdle which is formed round this shell by the filling up of the marginal slit is peculiarly painted with a regular series of square, equidistant, reddish brown spots. The canal is short, and somewhat twisted.

Species 2. (Mus. Stainforth.)

PLEUROTOMA VARIEGATA. *Pleur. testâ turritâ, fusiformi, griseolâ, fusco-maculatâ, lineis undulatis longitudinaliter pictâ; anfractibus convexis, transversim sulcatis, obscurè granoso-striatis, supernè zonâ bicarinatis; spirâ elongatâ, acutâ; canali ad basin subflexuosâ.*

THE VARIEGATED PLEUROTOMA. Shell turrited, fusiform, greyish, brown spotted, and painted longitudinally with undulated lines; whorls convex, transversely sulcated, obscurely grained and ornamented round the upper half with a double zone or belt; spire rather elongated and acute; canal rather flexuous at the base.

KIENER, Iconographie, pl. 9. f. 1.

Hab. Indian Ocean, Kiener.

Kiener appears to have been the first to notice the specific peculiarities of this shell. It is of a pale greyish colour, variegated with numerous granular spots of reddish brown, ranging in the form of striæ and longitudinal streaks.

Species 3. (Mus. Stainforth.)

PLEUROTOMA TIGRINA. *Pleur. testâ fusiformi-turritâ, multicarinatâ, albido-griseâ, nigro-punctatâ, striis transversis, tenuissimè granulosis, ornatâ; anfractibus convexis, medio bicarinatis; canali longiusculo.*

THE TIGER-SPOTTED PLEUROTOMA. Shell fusiform and turrited, many-keeled, of a greyish white colour, more or less spotted with black and ornamented with very finely granulated transverse striæ; whorls convex, doubly carinated round the periphery; canal rather long.

LAMARCK, Anim. sans vert., vol. vii. p. 95.

KIENER, Iconographie, pl. 8. f. 1.

Hab. Philippine Islands (sandy mud, seven fathoms).

Few species exhibit a greater variety of growth and marking than this; the periphery of the whorls is nevertheless constantly prominent and acute, and it is peculiar in being doubly carinated.

Species 4. (Mus. Stainforth.)

PLEUROTOMA GARNONSII. *Pleur. testâ elongato-turritâ, gracillimè fusiformi, albidâ, transversim multicari-*

natâ, carinis maculis parvis rubido-fuscis vividè pictis; anfractibus convexis, macularum grandium serie supernè ornatis; anfractu ultimo infrà fusco-fasciato; canali plus minusve elongato.

GARNONS' PLEUROTOMA. Shell elongately turrited, slender, fusiform, whitish, transversely keeled, keels vividly painted with small reddish brown spots; whorls convex, ornamented round the upper part with a row of large square brown spots or patches; last whorl with a brown band round the lower part, it being concealed in the rest by the natural deposit of one whorl upon the other; canal more or less elongated.

Pleurotoma Babylonia, var. Kiener.

Hab. Island of Zebu, Philippines.

We have much pleasure in dedicating this species to our excellent friend the Rev. W. L. P. Garnons, F.L.S. &c. The labour which this worthy gentleman has bestowed on the arrangement of the Woodwardian collection of shells at Cambridge bears ample testimony of his zeal for the science.

Several specimens of this shell have lately made their appearance in London, but we are not aware from whence they have arrived. The above locality is quoted from a single specimen found by Mr. Cuming at that place lying dead upon the shore at low water.

Species 5. (Mus. Cuming.)

PLEUROTOMA BABYLONIA. *Pleur. testâ fusiformi-turritâ, transversim carinatâ et cingulatâ, albâ; cingulis nigerrimo-maculatis; maculis quadratis; anfractibus convexis; canali longiusculâ.*

THE TOWER OF BABEL PLEUROTOMA. Shell fusiformly turrited, transversely carinated and belted, white; belts ornamented with very black square spots; whorls convex, canal rather long.

LAMARCK, Anim. sans vert., vol. vii. p. 94. Encyclopédie Méthodique, pl. 439. f. 1. *a, b.*

Murex Babylonius, Linnæus.

Hab. Moluccas, Philippines, New Guinea, &c.

The spots which ornament this shell are peculiar in being very black and very distinctly picked out; in some specimens (as in the one here figured) they are large and somewhat distant from each other, whilst in many they are numerous, smaller, and more thickly set.

Species 6. (Mus. Stainforth.)

PLEUROTOMA SPECTABILIS. *Pleur. testâ subelongato-turritâ, multicingulatâ; albâ, cingulis nigro-maculatis, maculis grandibus et parvis, numerosissimis; anfractibus convexis, suprà et infrà fusco-fasciatis; canali brevi, leviter flexuosâ.*

THE HANDSOME PLEUROTOMA. Shell rather elongately turrited, many-belted; white, belts black spotted, spots large and small intermixed, very numerous; whorls convex, brown banded above and below; canal short, slightly flexuous.

Hab. Island of Ticao, Philippines (on the reefs).

The spotting is of a more numerous and miscellaneous character in this species than in any of the genus, though it presents in certain respects a modification of that in the *Pleurotoma Garnonsii.* The dusky band which girds the lower portion of the whorls in that species is exhibited both round the lower and upper portions in this, and the number of spots is apparently doubled in like manner; the canal is short, and presents a great peculiarity of character.

Species 7. (Mus. Stainforth.)

PLEUROTOMA CRYPTORRHAPHE. *Pleur. testâ gracillimè turritâ, transversè striatâ, umbilicatâ, fusco-olivaceâ, aperturâ purpureo-tinctâ; anfractibus bicarinatis, suturis profundè impressis; labro externo leviter fimbriato, canali brevi, subtortuoso.*

THE DEEP-SUTURED PLEUROTOMA. Shell very slenderly turrited, transversely striated, umbilicated, dark olive-coloured, aperture stained with purple; whorls doubly keeled, sutures deeply impressed; outer lip slightly fimbriated; canal short and somewhat twisted.

SOWERBY, App. Tankerville Catalogue, p. xiv.

REEVE, Conch. Syst., pl. 234. f. 15.

Murex bicarinatus, Wood.

Pleurotoma Woodii, Kiener.

Hab. Island of Masbate, Philippines (on the reefs at low water).

This shell is at present very rarely to be met with in fine condition, the specimen here figured is the only perfect one I remember having seen.

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PLEUROTOMA.

PLATE II.

Species 8. (Mus. Stainforth.)

PLEUROTOMA EXASPERATA. *Pleur. testâ turritâ, anfractibus in medio tuberculato-muricatis, tuberculis solidis, acutis; albâ, anfractu ultimo zonâ fuscâ cingulato; canali brevissimo; columellâ albâ, supernè callosâ; aperturâ fauce albâ.*

THE SHARP-POINTED PLEUROTOMA. Shell turrited, whorls tuberculated round the middle, tubercles solid and sharp; white, last whorl encircled with a clear, dark brown zone; canal very short; columella white, with a callosity at the upper part; aperture white within.

Hab. —— ?

This interesting little shell resembles the *Pleurotoma unizonalis* in being surrounded with a single clear dark band; but it differs, first, in being of a more turrited form; secondly, in having the whorls encircled with a sharp row of tubercles instead of longitudinal ribs; and thirdly, in the columella and interior being white, whereas in that species it is always brown.

Species 9. (Mus. Stainforth.)

PLEUROTOMA SPECIOSA. *Pleur. testâ acutè turritâ, transversim subtilissimè funiculatâ; cæruleo-albâ, funiculis pallidè ochraceis; anfractibus in medio eximiè gemmatis, infernè convexis, supernè leviter concavis; canali gracili, vix elongato.*

THE BEAUTIFUL PLEUROTOMA. Shell sharply turrited, very finely corded transversely; bluish white, cords pale bright ochre; whorls delicately beaded round the middle, convex below, rather concave beneath; canal slender, rather long.

Hab. —— ?

This very chaste shell approaches somewhat in form and general appearance to the *Pleurotoma Kieneri*; it is of a pale bluish ground, delicately corded and beaded with bright ochraceous yellow.

There is another exactly similar specimen in the collection of Henry Inwood, Esq.

Species 10. (Mus. Cuming.)

PLEUROTOMA BECKII. *Pleur. testâ oblongâ, cylindraceo-attenuatâ, apice acuto; sexangulatâ, anfractibus ad angulos longitudinaliter tuberculatis; olivaceo-fuscâ, tuberculis tantum albis; columellâ et aperturæ fauce fuscâ; canali brevissimo.*

BECK'S PLEUROTOMA. Shell oblong, cylindrically attenuated, sharp at the apex; six-angled, whorls longitudinally tuberculated at the angles; the entire shell olive-brown except the tubercles, which are white; columella and interior of the mouth brown; canal very short.

REEVE, Zool. Proc., 1842. Conch. Syst., vol. ii. p. 234. f. 11.

Hab. Bauang, Island of Luzon.

I dedicate this pretty shell with much pleasure to the learned curator of that noble patron of conchological science, the King of Denmark. It was found by Mr. Cuming in the locality above cited under stones at low water. The snowy-white tubercles which ornament this brown six-angled shell at the several angles are very characteristic.

Species 11. (Fig. *a* and *b*, Mus. Cuming.)

PLEUROTOMA CRISPA. *Pleur. testâ fusiformi, transversim carinatâ, albidâ, lineolis rubido-fuscis, longitudinalibus, interruptis, pictâ; anfractibus multicarinatis, carinarum interstitiis imbricato-crispis; canali elongato.*

THE CRISPED PLEUROTOMA. Shell fusiform, transversely carinated, white, painted with reddish brown longitudinal lines; whorls many-keeled, the interstices between the keels being finely crisped or granulated; canal long.

LAMARCK, Anim. sans vert., vol. vii. p. 95.

Enc. Méth., pl. 439. f. 4.

Hab. Island of Masbate, Philippines. (Found on the coral reefs at low water.)

The shell which we have here figured from Mr. Cuming's collection is undoubtedly the true *Pleurotoma crispa* of Lamarck, and not the large Chinese shell (*Pleurotoma grandis*) referred to it by Kiener. Another, but inferior, specimen of the same in the collection of Mr. Stainforth agrees exactly with the figure in the 'Encyclopedie Méthodique,' and a third specimen, collected by Mr. Cuming himself in the locality above cited, removes all doubt on the subject. The three specimens here spoken of are each of the same uniform size, and the dark

painting distributed in transverse lines (*lineolis*), and not in any degree blotched or clouded, makes them agree precisely with Lamarck's description.

Species 12. (Mus. Stainforth.)

PLEUROTOMA UNEDO. *Pleur. testâ angulato-turritâ, fusiformi, striis longitudinalibus et transversis reticulatâ, costellisque subdistantibus, subtilissimè granulosis, cinctâ; albâ, spadiceo maculatâ et longitudinaliter nebulosâ; anfractibus supernè angulatis, peripheriâ leviter bicarinatâ; canali vix elongato; labro sinu subcentrali.*

THE STRAWBERRY PLEUROTOMA. Shell angularly turrited, fusiform, reticulated with transverse and longitudinal striæ, and encircled with small, very finely granulated, rather distant ribs; white, spotted and longitudinally clouded with reddish brown; whorls angulated at the upper part; periphery lightly bicarinated; canal rather long; lip with the sinus rather central.

VALENCIENNES, MSS. Paris Museum.

KIENER, Icon. pl. 14. f. 1.

Hab. Seas of India, Kiener.

This excellent species of Valenciennes cannot fail to be recognised by the characteristic figure with which our description is accompanied.

Species 13. (Mus. Cuming.)

PLEUROTOMA GRANDIS. *Pleur. testâ longissimâ, fusiformi, multicarinatâ; albâ, maculis irregularibus fuscis marmoratâ, strigis interdum subobsoletis longitudinaliter nebulosâ; anfractibus convexis, carinarum interstitiis imbricato-crispis; canali elongato.*

THE GREAT PLEUROTOMA. Shell very long and fusiform, many-keeled, white, marbled with irregular dark spots and blotches, and longitudinally clouded with streaks of the same colour, which are sometimes nearly obsolete; whorls convex, the interstices being finely crisped or grained; canal long.

GRAY, Griffith's Cuv. An. King. pl. 23. f. 1.

Pleurotoma crispa, Kiener (not of Lamarck).

Hab. Indian and Chinese Seas.

Having perfectly identified the *Pleurotoma crispa* of Lamarck, we gladly bear testimony to the correctness of Mr. Gray's views in regard to this magnificent shell, which the first-named conchologist was evidently unacquainted with.

Species 14. (Mus. Cuming.)

PLEUROTOMA AUSTRALIS. *Pleur. testâ turritâ, fusiformi, rubido-fulvâ, costellis transversis, subtiliter granulosis, cinctâ; anfractibus subventricosis, supernè lævibus, depressis; canali elongato, recto; labro rotundato, sinu lato, ab anfractu ultimo separato.*

THE SOUTHERN PLEUROTOMA. Shell turrited, fusiform, reddish yellow, encircled with small, finely granulated transverse ribs; whorls rather ventricose, smooth and depressed at the upper part; canal long and straight; lip rounded, separated from the upper whorl by a broad sinus.

DE ROISSY, Kiener Icon., pl. 4. f. 1.

Murex australis, Chemnitz, Conch., vol. xi. pl. 190, f. 1827 and 1828.

Hab. China.

The delicate buff-coloured ribs which encircle this shell are much more strongly granulated in some specimens than in others.

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21b

PLEUROTOMA.

PLATE III.

Species 15. (Mus. Stainforth.)

PLEUROTOMA ARCUATA. *Pleur. testâ arcuato-fusiformi, tenui, inflatâ, subpellucidâ, anfractibus lineatis, in medio acutè carinatis, carinâ maculis fuscis regularibus ornatâ; labro externo rotundato, ab anfractu ultimo sinu lato separato; canali gracili, arcuato, spiræ longitudinem æquante.*

THE CURVED PLEUROTOMA. Shell arcuately fusiform, thin, inflated, rather transparent; whorls lined, and sharply keeled round the middle, keel painted with regular brown spots; lip rounded, separated from the last whorl by a broad sinus; canal slender, curved, equalling the length of the spire.

Hab. Coast of Veragua, Central America.

A few specimens only of this inflated transparent-looking shell were collected at the above-mentioned place, by R. Hinds, Esq., of Her Majesty's Ship Sulphur, a zealous and intelligent conchologist.

Species 16. (Mus. Cuming.)

PLEUROTOMA PICTA. *Pleur. testâ acutissimè turritâ, solidâ, transversim carinatâ, albâ, carinis perspicuis, subdistantibus, maculis fuscis perparce pictis, carinâ superâ valdè maximâ; labro fissurâ parvâ, subcentrali; canali recto, spiræ longitudinem æquante.*

THE PAINTED PLEUROTOMA. Shell solid, very sharply turrited, transversely carinated, white; keels, which are distinct and rather distant, sparingly painted with faint brown spots, uppermost keel very much the largest; lip with a small, nearly central fissure; canal straight, equalling the length of the spire.

BECK MSS., Museum of the King of Denmark.

Hab. Panama, St. Blas, Gulf of Nicoya, &c., Western coast of America. Hinds.

This shell is of a straight solid growth, and cannot well be confounded with any species hitherto described.

Species 17. (Fig. *a* and *b*, Mus. Cuming.)

PLEUROTOMA OXYTROPIS. *Pleur. testâ turrito-subulatâ, brunnescente, anfractibus validè carinatis, interstitiis decussatis, carinâ superâ maximâ, conspicuâ; fissurâ subcentrali; canali recto, spiræ longitudinem æquante.*

THE STRONGLY-KEELED PLEUROTOMA. Shell sharply turrited, brownish; whorls strongly keeled, uppermost keel largest, conspicuous; slit rather central; canal straight, equalling the length of the spire.

SOWERBY, Proc. Zool. Soc., 1833.

REEVE, Conch. Syst., vol. ii. pl. 233. f. 2.

Hab. Bay of Panama. (Found in sandy mud at from thirteen to twenty fathoms depth.) Cuming.

I have figured a very young and an adult specimen of this rare species, in order to exhibit the remarkable change of form which it apparently assumes in different stages of growth; the series of specimens before me is not sufficiently extensive to show the complete progress.

Species 18. (Mus. Cuming.)

PLEUROTOMA UNDOSA. *Pleur. testâ elongato-turritâ, transversim carinatâ et striatâ, albidâ, maculis strigisve rubido-fuscis, longitudinaliter undosis, profusè ornatâ; canali breviusculo, columellâ et aperturæ fauce purpureo-tinctâ.*

THE WAVED PLEUROTOMA. Shell elongately turrited, transversely carinated and striated, whitish, profusely ornamented with longitudinally-waved reddish-brown spots or streaks; canal rather short; columella and within the aperture stained with purple.

LAMARCK, Anim. sans vert., vol. vii. p. 95; Enc. Méth., pl. 439. f. 5.

Hab. Island of Masbate, Philippines. (Found on coral reefs.) Cuming. Coast of Pondicherry, India. Kiener.

I cannot see the resemblance noticed by Kiener between this shell and the *Pleurotoma variegata* (Sp. 2.); indeed, they would come under separate sections in a systematic arrangement of the group, by reason of the difference in their canals.

Species 19. (Mus. Stainforth.)

PLEUROTOMA DESHAYESII. *Pleur. testâ elongato-turritâ, fusco-flavescente, transversim striatâ, exiliter carinatâ; anfractibus leviter convexis, zonulâ in medio cinctâ; canali longiusculo.*

DESHAYES' PLEUROTOMA. Shell elongately turrited, yellowish-brown, transversely striated, faintly sulcated,

not keeled; whorls slightly convex, encircled round the middle with a small zone; canal rather long.

DOUMET, Magasin de Zoologie, Mollusques, 1834.

Hab. China, Doumet.

This is the only shell I can at all identify with Doumet's *Pleurotoma Deshayesii*; it is of an uniform pale brown colour, and comparatively smooth throughout, the whorls being but faintly grooved and belted round the middle by the filling up of the labral slit.

Species 20. (Mus. Stainforth.)

PLEUROTOMA VIRGO. *Pleur. testâ solidâ, rectâ, fusiformi, transversim striatâ et carinatâ; albâ, immaculatâ, epidermide flavido-brunneâ indutâ; canali lato, elongato.*

THE VIRGIN PLEUROTOMA. Shell solid, straight, fusiform, transversely striated and carinated; white, unspotted, covered with a yellowish-brown epidermis; canal broad, and rather long.

LAMARCK, Anim. sans vert., vol. vii. p. 94.

Turris nivea, Martini, Conch., vol. iv.

Murex virgo, Wood.

Hab. ——?

This shell, which has been vulgarly called the White Tower of Babel, is rarely to be seen with its rich epidermis. I have no authority for its habitat.

Species 21. (Mus. Stainforth.)

PLEUROTOMA MARMORATA. *Pleur. testâ turritâ, fusiformi, transversim striatâ et carinatâ, albâ, rubido-fusco aut maculatâ, aut marmoratâ, canali plus minusve elongato; fissurâ valdè profundâ.*

THE MARBLED PLEUROTOMA. Shell turrited, fusiform, transversely striated and carinated, white, either spotted or marbled with reddish-brown; canal more or less elongated; slit very deep.

Fig. *a*, var. *maculata*.

Fig. *b*, var. *marmorata*.

LAMARCK, Anim. sans vert., vol. vii. p. 95.

Hab. Straits of Malacca. (In coarse sand at the depth of ten fathoms.) Cuming.

I have figured very extreme specimens of the two varieties above noted, in order to show how variable is this species both in form and in painting.

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22b

24a

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24b

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PLEUROTOMA.

PLATE IV.

Species 22. (Fig. *a* and *b*, Mus. Stainforth.)

PLEUROTOMA PAPALIS. *Pleur. testâ fusiformi, acutè turritâ, pallidè luteo-brunnescente, anfractibus supernè concavis, longitudinaliter leviter liratis, liris numerosis; anfractu ultimo pallidè albo-fasciato; canali brevi.*

THE PAPAL PLEUROTOMA. Shell fusiform, sharply turrited, pale yellowish brown; whorls concave round the upper part, longitudinally lightly ridged, ridges numerous, last whorl encircled with a pale band; canal short.

REEVE, Pro. Zool. Soc., 1843.

Pleurotoma mitræformis, var., Kiener, Icon., pl. 21. f. 1 *a*.

Hab. ——?

After carefully examining one or two specimens of this shell which Kiener describes as a variety of the following species, I am forced to the conclusion that it is specifically distinct.

Species 23. (Mus. Stainforth.)

PLEUROTOMA MITRÆFORMIS. *Pleur. testâ elongato-fusiformi, apice acuminato, luteo-brunnescente, striis numerosis, subgranulosis, transversim et longitudinaliter decussatâ; anfractibus supernè leviter concavis; canali breviusculo.*

THE MITRE-SHAPED PLEUROTOMA. Shell elongately fusiform, apex acuminated, yellowish brown, transversely and longitudinally crossed with numerous, somewhat granulated striæ; whorls slightly concave round the upper part; canal rather short.

KIENER, Icon. pl. 21. f. 1.

Murex mitræformis, Wood, Index Test. Supp., pl. 5. f. 5.

Hab. Coast of Senegal, Mouth of the Gambia, &c.

This shell is longer and more cylindrical than the preceding, and never exhibits the fine longitudinal ridges.

Species 24. (Mus. Stainforth.)

PLEUROTOMA FASCIALIS. *Pleur. testâ subfusiformi, turritâ, anfractibus supernè angulato-carinatis; superficie multifuniculatis, funiculis nigro-fuscis, interstitiis pallidioribus; canali breviusculo.*

THE CORDED PLEUROTOMA. Shell somewhat fusiform, turrited; whorls angularly carinated round the upper part, entire surface encircled with fine blackish brown cords, the spaces between them being of a paler colour; canal rather short.

LAMARCK, Anim. sans vert., vol. vii. p. 93.

KIENER, Icon., pl. 4. f. 2.

Murex elegans, Wood, Ind. Test. Supp., pl. 5. f.

Hab. Islands of Ticao and Masbate, Philippines; Cuming.

Lamarck's description of this shell was evidently made from a worn specimen, in which the rich dark brown transverse cords had assumed a reddish cast of colour.

Species 25. (Mus. Belcher.)

PLEUROTOMA TAXUS. *Pleur. testâ solidâ, conico-subulatâ, flavescente, epidermide crassâ, fusco-olivaceâ, indutâ; anfractibus in medio concavis, infernè leviter nodulosis, longitudinaliter striatis, striis supernè sinistrorsum, infernè dextrorsum dispositis; canali brevi.*

THE YEW PLEUROTOMA. Shell solid, conically subulate, yellowish, covered with a thick, dark olivaceous epidermis; whorls concave in the middle, slightly nodulous round the lower part, longitudinally striated, striæ running obliquely towards the left on the upper part of the whorl, to the right on the lower; canal short.

KIENER, Icon., pl. 10. f. 1.

Murex taxus, Chemnitz, Conch., vol. x. pl. 162. f. 1550 and 1551.

Hab. Cape of Good Hope; Hinds.

By the kindness of Capt. Sir Edward Belcher, whose rich conchological stores, collected under the able superintendence of Richard Hinds, Esq., during a voyage of more than seven years round the world in Her Majesty's Ship "*Sulphur*," have been liberally offered for illustration, I am enabled to figure this highly interesting species for the first time with its rich, dark epidermis. Several specimens in different stages of growth were dredged near the Cape of Good Hope by the zealous naturalists above mentioned, and they vary most singularly in form, some being considerably longer and narrower (more Terebra-like) than the one I have selected for illustration. The specific title of *taxus* appears to have been selected for this shell by the author of the

'Conchylien Cabinet' on account of its imagined resemblance to the erect stem or trunk of the yew-tree.

Species 26. (Mus. Cuming.)

Pleurotoma Javana. *Pleur. testâ elongato-fusiformi, albâ, fulvo longitudinaliter nebulosâ; anfractibus convexiusculis, supernè concavo-depressis; canali elongato, flexuoso, transversim striato; labro tenui, latè emarginato.*

The Java Pleurotoma. Shell elongately fusiform, white, clouded longitudinally with yellowish streaks; whorls rather convex, upper part hollow and depressed; canal long, flexuous, transversely striated; lip thin, widely emarginated.

De Roissy. Kiener, Icon., pl. 5. f. 1.

Murex Javanus, Linnæus.

Murex tornatus, Wood.

Hab. —— ?

This shell is by no means uncommon in an imperfect state, white, without the least indication of colour.

Species 27. (Mus. Cuming.)

Pleurotoma olivacea. *Pleur. testâ fusiformi, olivaceâ, anfractibus valdè tuberculosis, striatis quasi funiculatis, supernè lævibus; canali amplo; labro posticè sinuato, fauce striatâ.*

The olive-brown Pleurotoma. Shell fusiform, olive-brown; whorls strongly tuberculated, and striated as if they were corded, upper part smooth; canal large; lip sinuated at its junction with the last whorl, interior striated.

Sowerby, Pro. Zool. Soc., 1833, p. 136.

Pleurotoma funiculata, Valenciennes MSS.; Kiener, Icon., pl. 16. f. 4.

Hab. Salango and St. Elena, West Columbia; Cuming. Panama, Gulf of Nicoya and Western Coast of Mexico (from mud in four to seven fathoms depth); Hinds.

I am not surprised that Kiener should have failed to recognise this species; it is exceedingly difficult to identify a shell by description alone.

Species 28. (Mus. Cuming.)

Pleurotoma nodifera. *Pleur. testâ fusiformi, turritâ, cinereo-fulvâ; anfractibus medio angulatis, supra angulum lævibus, infra striatis; angulo nodulis oblongis, albidis, obliquis, uniseriatim cincto; labro subinflato, rotundato, sinu lato; canali flexuoso.*

The knobbed Pleurotoma. Shell fusiform, turrited, ashy yellow; whorls angular in the middle, smooth above and striated below; angle ornamented with a single series of oblique white oblong knobs; lip rather inflated, rounded; sinus broad; canal flexuous.

Lamarck, Anim. sans vert., vol. vii. p. 96.

Kiener, Icon., pl. 12. f. 1.

Pleurotoma Javana, Enc. Méth., pl. 439. f. 3.

Hab. Straits of Malacca (from mud in eighteen fathoms depth); Hinds.

I have a very compactly operculated specimen of this shell in my possession. The operculum is horny, rather thin, and fits closely to the aperture.

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PLEUROTOMA.

PLATE V.

Species 29. (Mus. Stainforth.)

PLEUROTOMA OBESA. *Pleur. testâ obeso-fusiformi, spirâ turritâ, anfractibus luteolis, supernè albis, lineis fulvis, obliquis, longitudinaliter venosis; labro acuto, sinu subcentrali; canali mediocri, brevi, subitò flexuoso.*

THE STOUT PLEUROTOMA. Shell stoutly fusiform, spire turrited; whorls yellowish, white round the upper part, longitudinally veined with fine yellow lines; lip acute, sinus nearly central; canal middling, short, suddenly twisted.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

On referring to the figure which accompanies the above description, it will be seen that my *Pl. obesa* is not the shell figured in Conch. Syst., vol. ii. pl. 235. f. 5. from Sowerby's "Genera," as I at first supposed. The figure alluded to is of such large dimensions, that I could not recognise it as representing a yellow variety of the *Pl. lineata*; and as a proof of its liability to be misunderstood, I may add that Kiener supposes it to be intended for his *Pl. fulminata*.

Species 30. (Mus. Stainforth.)

PLEUROTOMA GIBBOSA. *Pl. testâ elongato-turritâ, cinereâ; anfractibus supernè leviter concavis, longitudinaliter plicatis, striisque decussatis; anfractûs ultimi plicis in costellas confluentibus, dorso tuberculi gibboso, spadiceo notato; labro subexpanso, sinu lato, profundo; canali brevissimo, leviter recurvo.*

THE SWOLLEN PLEUROTOMA. Shell elongately turrited, ash-coloured; whorls slightly concave round the upper part, longitudinally plaited, decussated with striæ; plaits of the last whorl flowing down like small ribs, back of the last whorl marked with a dark chestnut-coloured swollen tubercle; lip rather expanded, with the sinus, broad and deep; canal very short, a little recurved.

KIENER, Icon., pl. 12. f. 2.

Murex gibbosus, Chemnitz, Conch., vol. xi. pl. 190.

Hab. ——?

Lamarck does not seem to have been acquainted with this shell; the *Pl. unimaculata*, a newly discovered species (vide pl. 6. f. 42.), is a light, elegant fac-simile of it.

Species 31. (Mus. Cuming.)

PLEUROTOMA MURICATA. *Pleur. testâ ovato-conicâ, tuberculiferâ, striis decussatâ, epidermide olivaceo-viridi indutâ; anfractibus supernè concavis, tuberculis cuspidatis seriatim cinctâ; canali brevi, leviter recurvo.*

THE PRICKLY PLEUROTOMA. Shell ovately conic, tuberculous, decussated with striæ, covered with an olive-green epidermis; whorls concave round the upper part, encircled with a row of spear-shaped tubercles; canal short, slightly recurved.

LAMARCK, Anim. sans vert., vol. vii. p. 91.

KIENER, Icon., pl. 17. f. 2 and 2 *a*.

Pleurotoma conica, Enc. Méth., pl. 439. f. 9. *a*, *b*.

Murex mitra, Wood, Ind. Test. Supp., pl. 5. f. 5.

Hab. Mouth of the Gambia; Lieut. Shaw.

This shell, which has a remarkably strong epidermis, is sometimes faintly tinged with violet in the interior.

Species 32. (Mus. Stainforth.)

PLEUROTOMA VIRGINEA. *Pl. testâ fusiformi-turritâ, pallidè luteolâ; anfractibus in medio angulatis, tuberculis minutis albis seriatim cinctis; anfractu ultimo multiseriatim granuloso; canali mediocri, leviter recurvo.*

THE CHASTE PLEUROTOMA. Shell fusiformly turrited, pale yellowish colour; whorls angulated in the middle, encircled with a series of very small white tubercles; last whorl encircled with several series of granulations; canal middling, slightly recurved.

BECK MSS., Museum of the King of Denmark.

Hab. Mouth of the Gambia; Lieut. Shaw.

This shell, though comparatively common in our collections, does not appear to have been hitherto described. It is an interesting species, but scarcely merits the very refined title that has been applied to it,

Species 33. (Mus. Hankey.)

PLEUROTOMA IMPERIALIS. *Pleur. testâ solidâ, abbreviato-fusiformi, ventricosâ, epidermide olivaceâ, crassâ, indutâ; anfractibus supernè squamis complicatis, brevibus, quasi tuberculis, seriatim cinctis; canali brevissimo, recurvo; aperturâ oblongo-ovatâ, fauce encausticâ, supernè et infernè purpureo-tinctâ.*

THE IMPERIAL PLEUROTOMA. Shell solid, of a shortened fusiform shape, ventricose, covered with a thick, dark, olive-coloured epidermis; whorls encircled

round the upper part with a series of closely-folded scales, like tubercles; canal very short, recurved; aperture oblong, interior highly enamelled, stained above and below with deep purple,

LAMARCK, Anim. sans vert., vol. vii. p. 91.

KIENER, Icon., pl. 20. f. 1.

Clavatula imperialis, Enc. Méth., pl. 440. f. 1. *a, b.*

Hab. Cabenda, West Coast of Africa. (Found at five fathoms depth in soft mud, washed down by the waters of the Congo.)

I am much indebted to Lieut. Hankey, R.N., for the loan of this rare and highly interesting shell, obtained by him at the above-mentioned locality with the animal in it. Another specimen before me, belonging to Mr. Cuming, was brought by Lieut. Shaw from the Gambia.

Species 34. (Mus. Stainforth.)

PLEUROTOMA BIMARGINATA. *Pleur. testâ fusiformi-turritâ, solidiusculâ, tuberculiferâ, fulvo-rubente; anfractibus medio concavis, supernè infernèque marginatis, suturis inter profundis; canali brevi, subflexuoso.*

THE DOUBLE-EDGED PLEUROTOMA. Shell fusiformly turrited, rather solid, tuberculous, yellowish red; whorls concave in the middle, distinctly margined above and below, leaving a deep, narrow suture between them; canal short, a little twisted.

LAMARCK, Anim. sans vert., vol. vii. p. 93.

KIENER, Icon., pl. 2. f. 2.

Hab. —— ?

The double-edge peculiarity of this shell is remarkable, and I am not acquainted with any other of this genus which exhibits the same reddish cast of colour.

Species 35. (Mus. Stainforth.)

PLEUROTOMA ANNULATA. *Pleur. testâ solidâ, subulatâ, brunneâ, anfractibus leviter convexis, liris lævibus, pallidioribus, numerosis, annulatim cinctis; canali subelongato.*

THE RINGED PLEUROTOMA. Shell solid, subulate, brown; whorls slightly convex, encircled with a number of smooth, paler ridges, like rings; canal rather long.

Hab. —— ?

This shell reminded me at first sight of the *Pl. Deshayesii* (*Pl. elongata*, Gray, Zoology of Beechey's Voyage, p. 119.); it may, however, be readily distinguished from that species by the number of well-marked, ring-like ridges by which the entire surface is encircled.

Species 36. (Mus. Stainforth.)

PLEUROTOMA CATENA. *Pleur. testâ elongato-fusiformi, turritâ, acuminatâ, flavido-griseâ; anfractibus medio valdè convexis, quasi subitò tumidis, tuberculis eximiis, albis, obliquis, seriatim coronatis; labro tenui, sinu lato; canali elongato, recto.*

THE CHAIN PLEUROTOMA. Shell elongately fusiform, turrited, acuminated, yellowish grey; whorls very convex in the middle, as if suddenly swollen, crowned with a series of oblique, very delicate, white tubercles; lip thin, sinus broad; canal long and straight.

Hab. —— ?

The leading feature of this new and very distinct shell is the bright, perlaceous series of link-shaped tubercles which run round the periphery of the whorls.

Species 37. (Brit. Mus.)

PLEUROTOMA FULMINATA. *Pleur. testâ fusiformi, subpyriformi, lævi, albidâ, flammulis maculisque rubris longitudinaliter fulminatâ; anfractu ultimo versus basin transversè striato, striis profundis; canali mediocri, leviter arcuato.*

THE LIGHTNING-MARKED PLEUROTOMA. Shell fusiform, somewhat pear-shaped, smooth, whitish, longitudinally streaked with reddish flames and spots; last whorl very deeply striated towards the base; canal middling, slightly curved.

KIENER, Icon., pl. 10. f. 2.

Hab. —— ?

M. Kiener is mistaken in supposing this to be the shell figured in Sowerby's genera under the title of *Pl. lineata, var.*

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PLEUROTOMA.

PLATE VI.

Species 38. (Mus. Cuming.)

PLEUROTOMA DISCORS. *Pleur. testâ turritâ, fuscâ; anfractibus supernè prope suturam unicarinatis, infernè nodulosis, medianè lævibus; anfractu ultimo transversim lineato, varice conspicuo; aperturâ brevi, ovatâ, labro profundè emarginato.*

THE DISCORDANT PLEUROTOMA. Shell turrited, blackish brown; whorls encircled with a single keel round the upper part, nodulous round the lower part, and smooth round the middle; last whorl transversely lineated, and has a rather prominent lump or varix; aperture short, ovate, lip deeply emarginated.

SOWERBY, Pro. Zool. Soc., 1833, p. 137.

REEVE, Conch. Syst., vol. ii. pl. 234. f. 10.

Hab. Island of Plata, West Columbia (dredged from coral sand at the depth of seventeen fathoms); Cuming.

The specimen here figured is the only one that has been seen, and is therefore at present unique in the collection of Mr. Cuming.

Species 39. (Mus. Cuming.)

PLEUROTOMA ZONULATA. *Pleur. testâ crassâ, subcylindricâ, nigerrimâ; anfractibus supernè lirâ, medianè cingulo flavo monilifero ornatis; anfractu ultimo liris cingulisque duobus; canali brevissimo.*

THE LITTLE-BELTED PLEUROTOMA. Shell thick, cylindrical, jet-black; whorls ornamented round the upper part with a small ridge, round the middle with a bright yellow-beaded belt; last whorl showing two ridges and two belts; canal very short.

REEVE, Conch. Syst., vol. ii. pl. 234. f. 10.

Pleurotoma cincta, Sowerby (not of Lamarck), Pro. Zool. Soc., 1833, p. 136.

Hab. Monte Christi and Xipixapi, Central America (found in sand and gravel at a depth of seven fathoms); Cuming.

Each whorl in this species is encircled with two fine ridges and two yellow-beaded belts, but one of each of these becomes hidden during the growth of the shell by the deposit of one whorl upon the lower half of the other.

Species 40. (Mus. Cuming.)

PLEUROTOMA BICOLOR. *Pleur. testâ oblongâ, pyramidali, fuscâ; anfractibus supernè concavis, infernè longitudinaliter costatis, costis flavidis, posticè tuberculiferis; canali brevissimo.*

THE TWO-COLOURED PLEUROTOMA. Shell oblong, pyramidal, blackish brown; whorls concave round the upper portion, lower portion longitudinally ribbed, ribs yellow and tuberculated posteriorly; canal very short.

SOWERBY, Pro. Zool. Soc., 1833, p. 135.

Hab. Panama and Gallapagos Islands (found under stones at the former place, in sand at the depth of eight fathoms in the latter); Cuming.

Care must be taken not to confound this species with the *Pl. zebra* which is always of reddish colour and more sharply turrited.

Species 41. (Mus. Cuming.)

PLEUROTOMA PYRAMIDATA. *Pleur. testâ acutissimè pyramidali, fuscâ; anfractibus supernè cingulo albido monilifero decurrente, medianè tumidis, eleganter plicatis, plicis albis, in serie regulari dispositis; canali brevissimo, subrecurvo.*

THE PYRAMIDAL PLEUROTOMA. Shell very sharply pyramidal, blackish brown; whorls with a small white-beaded band round the upper part, the middle part being swollen and elegantly plaited, plaits white, and arranged with great regularity; canal very short, and a little recurved.

VALENCIENNES, MSS. (Paris Museum.)

KIENER, Icon., pl. 21. f. 3.

Hab. Coast of Senegal, and the Gambia.

The figure which Kiener refers to in the 'Encyclopédie Méthodique' cannot have been intended to represent this shell.

Species 42. (Mus. Belcher.)

PLEUROTOMA UNIMACULATA. *Pleur. testâ turritâ, acuminatâ, albâ, anfractus ultimi dorso fusco-maculatâ; anfractibus medio tuberculatis, tuberculis in costellas interdum confluentibus; aperturâ brevi, labro expanso, profundè sinuato; canali brevi, recurvo.*

THE SINGLE-SPOTTED PLEUROTOMA. Shell turrited, acuminated, white, back of the last whorl being

vividly painted with a single brown spot; whorls tuberculated in the middle, the tubercles in some specimens flowing down in the form of ribs; aperture short, lip expanded, deeply sinuated; canal short, recurved.

SOWERBY, Pro. Zool. Soc., 1833, p. 134.

REEVE, Conch. Syst., vol. ii. pl. 233. f. 9.

Hab. West Columbia and Central America. (Found in sandy mud in from eight to sixteen fathoms.)

This beautiful shell, which has been collected both by Mr. Cuming and Capt. Belcher, may probably be merely a white variety of the *Pl. gibbosa*, Kiener, *Murex gibbosus*, Chemnitz (see the preceding Plate, fig. 30.). I must say, however, that I find no intermediate variation between the ashy dulness of the *Pl. gibbosa* and the ivory brightness of the *Pl. unimaculata*.

Species 43. (Mus. Cuming.)

PLEUROTOMA ROSEA. *Pleur. testâ turritâ, acuminatâ, albidâ, anticè roseo-tinctâ; anfractibus valdè tuberculatis, tuberculis ovatis, anticè in costellas confluentibus; labro expanso, profundè sinuato; canali brevi, recurvo.*

THE ROSE-TINTED PLEUROTOMA. Shell turrited, acuminated, white, rose-tinted anteriorly; whorls strongly tuberculated, tubercles ovate, flowing anteriorly into ribs, as visible on the last whorl; lip expanded, deeply sinuated; canal short, recurved.

SOWERBY (not of Quoy), Pro. Zool. Soc., 1833, p. 134.

REEVE, Conch. Syst., vol. ii. pl. 133. f. 3.

Hab. Salango and Monte Christi, Central America (found in sandy mud at a depth of twelve to sixteen fathoms); Cuming.

The penultimate tubercle of this shell becomes enlarged into a kind of hump like the spot which characterizes the preceding species, and as there are many species which exhibit this peculiarity of increase just prior to their reaching maturity, I should suppose it to depend upon some peculiar economy in the animal inhabitant.

Species 44. (Mus. Stainforth.)

PLEUROTOMA SPIRATA. *Pleur. testâ subobeso-conicâ, acutè turritâ, læviusculâ, cinereâ, fusco leviter nebulosâ; anfractibus planis, supernè angulatis, parte superiori in aream planam spiraliter ascendente; labro acuto, sinu subcentrali; canali longiusculo.*

THE SPIRAL PLEUROTOMA. Shell rather stoutly conical, sharply turrited, rather smooth, ash colour, slightly clouded with brown; whorls flat, angulated round the upper part, which ascends spirally with a flat area; lip sharp, sinus near the centre; canal rather long.

LAMARCK, Anim. sans vert., vol. vii. p. 93; Enc. Méth., pl. 440. f. 5. *a* and *b*.

Hab. —— ?

Lamarck refers this shell to the *Murex Perron* of Chemnitz, under the impression that the transverse ridges represented in that figure (Conch. Cab. vol. x. pl. 164. f. 1573.) were worn off in his specimen of *Pl. spirata*. I have, however, a shell before me of very different character (*Pleurotoma Perronii*, nobis), answering exactly to the figure in question.

Species 45. (Mus. Stainforth.)

PLEUROTOMA MACULOSA. *Pleur. testâ oblongo-fusiformi, turritâ, cærulescente, fusco-maculosâ; anfractibus lævigatis, medio tuberculiferis, tuberculis uniserialibus; aperturâ oblongâ; sinu lato; canali brevi.*

THE SPOTTED PLEUROTOMA. Shell oblong, fusiform, turrited, bluish, spotted with brown; whorls smooth, tuberculated in the middle, tubercles in one regular series; aperture oblong, sinus broad; canal short.

SOWERBY, Pro. Zool. Soc., 1833, p. 135.

REEVE, Conch. Syst., vol. ii. pl. 233. f. 8.

Hab. West Columbia (found in sandy mud at a depth of sixteen fathoms); Cuming.

Several specimens of this shell have been lately brought of a dark bluish, almost ashy colour.

Species 46. (Mus. Belcher.)

PLEUROTOMA DIADEMA. *Pleur. testâ conico-fusiformi, subturritâ, albidâ, rubido-fusco nebulosâ; anfractibus convexis, infernè plicis exiguis longitudinaliter granulatis, supernè concavis, spinis brevibus acutis uniseriatim coronatis; sinu lato, canali longiusculo, columellâ subumbilicatâ.*

THE DIADEM PLEUROTOMA. Shell conically fusiform, somewhat turrited, whitish, clouded with reddish brown; whorls convex, lower portion longitudinally granulated with small plaits; upper portion concave, coronated with a single row of short, sharp spines.

KIENER, Icon., pl. 8. f. 2.

REEVE, Conch. Syst., vol. ii. pl. 234. f. 18 and 20.

Hab. Cape Blanco, Coast of Africa; Hinds.

This shell is one of the most beautiful of the genus,

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Sowerby del.

PLEUROTOMA.

PLATE VII.

Species 50. (Mus. Stainforth.)

PLEUROTOMA SUTURALIS. *Pleur. testâ fusiformi, turritâ, flavido-fuscâ, albo brunneoque fasciatâ, anfractibus subrotundatis, supernè depressis, longitudinaliter costatis, transversim tenuissimè striatis; aperturâ oblongâ, canali subrecurvo.*

THE SUTURAL PLEUROTOMA. Shell fusiform, turrited, yellowish brown, banded with white and brown; whorls somewhat rounded, depressed next the suture, longitudinally ribbed, transversely very finely striated; aperture oblong, canal a little recurved.

BRONN, Erg. mei. nat. Reise, vol. ii. p. 556.

PHILIPPI, Enum. Moll. Sicil., p. 197.

Pleurotoma Comarmondi, Michaud.

Murex gracilis, Montague.

Murex oblongus, Brocchi.

Hab. Mediterranean Sea, Coast of Britain, &c.

This is undoubtedly the well-known *Murex gracilis* of British authors.

Species 51. (Mus. Walton.)

PLEUROTOMA INTERRUPTA. *Pleur. testâ turrito-subulatâ, longitudinaliter costatâ, costis lævibus, subdistantibus; transversim striatâ, pallidè fuscâ, costis rufis; anfractibus supernè unicarinatis; canali brevi, subrecurvo.*

THE INTERRUPTED PLEUROTOMA. Shell sharply turrited, longitudinally ribbed, ribs smooth and rather distant; transversely striated, pale brown, ribs reddish brown; whorls encircled round the upper part with a single keel; canal short, a little recurved.

LAMARCK, Anim. sans vert., vol. vii. p. 92; Enc. Méth., pl. 438. f. 1. *a*, *b*.

Hab. ——?

Chiefly characterized by the smooth reddish-looking distant ribs.

Species 52. (Mus. Belcher.)

PLEUROTOMA JUBATA. *Pleur. testâ acuminato-fusiformi, lævigatâ, flavido-brunneâ; anfractibus multicarinatis, carinâ mediâ maximâ, serie unicâ granulorum supernè cinctâ; canali breviusculo.*

THE CRESTED PLEUROTOMA. Shell acuminately fusiform, smooth, yellowish brown; whorls many-keeled, middle keel the largest, with a beaded row of granules immediately over it; canal rather short.

HINDS, Pro. Zool. Soc., 1843.

Hab. China Seas and Straits of Malacca (found in mud at the depth of eighteen fathoms); Hinds.

The little row of granules which encircles every whorl above the centre keel is exactly similar to that which in great measure distinguishes the *Pl. modesta* of Sowerby from the *Pl. cincta* of Lamarck.

Species 53. (Mus. Cuming.)

PLEUROTOMA RUDIS. *Pleur. testa turritâ, crassâ, nigerrimo-fuscâ; anfractibus medio coarctatis, suprà infràque tuberculatis, tuberculis inferioribus supernè albo-maculatis; anfractu ultimo subexcentrico; canali brevi; labro tenui, sinuoso, callositate suprà sinu armato.*

THE RUSTIC PLEUROTOMA. Shell turrited, thick, very dark brown, almost black; whorls contracted in the middle, tuberculated above and below, each of the lower tubercles having a white spot above it; last whorl rather out of the centre; canal short; lip thin, sinuous, armed above the sinus with a strong callosity.

SOWERBY, Pro. Zool. Soc., 1833, p. 134.

Hab. Monte Christi, West Columbia (found under stones); Cuming.

Species 54. (Mus. Stainforth.)

PLEUROTOMA CRENULARIS. *Pleur. testâ acutissimè turritâ, transversim striatâ; anfractibus supernè et infernè griseo-violaceis, medianè nodoso-crenulatis, nodis albis; suturis marginatis; canali breviusculo.*

THE CRENULATED PLEUROTOMA. Shell very sharply turrited, transversely striated; upper and lower portion of the whorls greyish violet, middle crenulated with white knobs; sutures marginated; canal rather short.

LAMARCK, Anim. sans vert., vol. vii. p. 92.

Hab. Tranquebar.

This shell, according to Lamarck, is the *Clavatula cre-*

nularis of the 'Encyclopédie Méthodique'; it is impossible to identify it by the figure.

Species 55. (Mus. Belcher.)

PLEUROTOMA MILITARIS. *Pleur. testâ elongatâ, acuminato-turritâ, albâ; anfractibus liris nodulosis subtilissimè decussatis, interstitiis striatis; superne concavis, carinâ subnodosâ marginatis; aperturâ oblongâ; canali brevi, recurvo.*

THE MILITARY PLEUROTOMA. Shell long, acuminately turrited, white; whorls very finely decussated with nodulous ridges, transversely striated in the interstices; upper part of the whorls concave, edged with a slightly nodulous keel; aperture oblong; canal short, recurved.

Clavatula militaris, Hinds, Pro. Zool. Soc., 1843.

Hab. Veragua, Central America (found in mud at the depth of eighteen fathoms); Hinds.

Species 56. (Mus. Stainforth.)

PLEUROTOMA CARINATA. *Pleur. testâ fusiformi, turritâ, albicante, maculis punctisque rubidis parcè ornatâ; anfractibus medio plano-carinatis, carinâ eximiè moniliferâ, suprà concaviusculis, striatis, infrà multicarinatis, carinis interlineatis; fissurâ centrali, amplâ; canali longiusculo.*

THE KEELED PLEUROTOMA. Shell fusiform, turrited, whitish, sparingly ornamented with reddish dots and spots; whorls flatly keeled round the middle, keel delicately beaded; above the keel rather concave, striated; below it numerous other keels with a line running between them; fissure central, large; canal rather long.

GRAY, Griff. Cuv. An. King., pl. 23.

Pleurotoma Kieneri, Doumet, Mag. de Zool.

Hab. ——?

I was at one time inclined to suppose that the figure in Griffith's 'Cuvier,' above referred to, was intended for my *Pl. speciosa*; the specimen there represented has however been kindly sent to me by Mr. Gray, and I find it to be identical with the shell subsequently dedicated to Kiener by M. Doumet.

Species 57. (Mus. Gray.)

PLEUROTOMA GRIFFITHII. *Pleur. testâ subfusiformi, pallidè fulvâ, transversim striatâ; anfractibus medio nodulosis, nodulis albis, supernè concavis, anfractu ultimo subalato, sinu amplo; aperturâ oblongâ; canali brevi, paululum recurvo.*

GRIFFITH'S PLEUROTOMA. Shell somewhat fusiform, yellowish, transversely striated; whorls nodulous in the middle, nodules white, upper part concave, last whorl slightly winged, sinus large; aperture oblong, canal a little recurved.

GRAY, MSS. (private cabinet).

Hab. ——?

A common species, not much unlike the *Pl. Stromboides* in shape.

Species 58. (Mus. Cuming.)

PLEUROTOMA EXCENTRICA. *Pleur. testâ pyramidali-oblongâ, crassâ, brunneâ; anfractibus duobus excentricis, supernè unicarinatis, carinâ undulatâ; infrà spiraliter sulcatis, deinde longitudinaliter costatis, costis transversim liratis; aperturâ brevi.*

THE DISTORTED PLEUROTOMA. Shell pyramidally oblong, thick, brown; whorls, the two last of which are out of the centre, keeled near the suture, keel undulated; beneath spirally sulcated, then longitudinally ribbed, ribs transversely ridged; aperture short.

SOWERBY, Pro. Zool. Soc., 1833.

Hab. Gallapagos Islands (found in coral sand at the depth of six fathoms); Cuming.

The excentric growth of this shell gives it a very curious appearance, the last and penultimate whorls looking exactly as if they had slipped from their original lodgement.

Species 59. (Mus. Gray.)

PLEUROTOMA MAJOR. *Pleur. testâ subfusiformi, fuscâ, transversim albo-lineatâ, anfractibus medio nodulosis, nodulis albis; aperturâ oblongâ, canali paululum recurvo.*

THE GREATER PLEUROTOMA. Shell somewhat fusiform, dark brown, transversely marked with white lines; whorls nodulated in the middle, nodules white; aperture oblong, canal a little recurved.

GRAY, MSS. (private cabinet).

Hab. ——?

Very closely allied to the *Pl. Griffithii*; indeed some authors would account it to be a variety of that species.

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Reeve Lith.

PLEUROTOMA.

PLATE VIII.

Species 60. (Mus. Cuming.)

PLEUROTOMA SPLENDIDULA. *Pleur. testâ elongato-pyramidali, roseo-fuscescente; anfractibus lævigatis; longitudinaliter costatis, costis obliquis, medio prominulis, subconfertis, albis; anfractûs ultimi dorso fusco, planulato; sinu lato.*

THE SPLENDID PLEUROTOMA. Shell elongately pyramidal, brownish rose-colour; whorls smooth, longitudinally ribbed, ribs oblique, prominent in the middle, rather close, white; back of the last whorl dark, smooth; sinus broad.

SOWERBY, Pro. Zool. Soc., 1833, p. 135.

Hab. Gallapagos Islands; Cuming.

The burnt rose-colour which appears between the longitudinal ribs, and on the back of the last whorl, is of very peculiar character.

Species 61. (Mus. Cuming.)

PLEUROTOMA PICA. *Pleur. testâ crassâ, obtuso-pyramidali, albâ, maculis fuscis, paucis, grandibus, subquadratis, irregularite rvariegatâ; anfractibus eleganter semicostatis, costis angustis, numerosis; supernè lævibus, concavis; sinu lato.*

THE PIED PLEUROTOMA. Shell thick, obtusely pyramidal, white, irregularly variegated with a few large squarish brown spots; whorls elegantly ribbed half-way up, ribs numerous and narrow; upper portion of the whorls smooth and hollowed out as it were; sinus broad.

REEVE, Pro. Zool. Soc., 1843.

Hab. Island of Capul, Philippines; Cuming.

A very solid white shell, pied here and there with dark brown blotches.

Species 62. (Mus. Cuming.)

PLEUROTOMA ALBICOSTATA. *Pleur. testâ acuminato-pyramidali, rosea; anfractibus lævibus, longitudinaliter costatis, costis confertis, albis; aperturâ brevi.*

THE WHITE-RIBBED PLEUROTOMA. Shell acuminately pyramidal, rose-colour; whorls smooth, longitudinally ribbed, ribs white and closely set; aperture short.

SOWERBY, Pro. Zool. Soc., 1833, p. 135.

REEVE, Conch. Syst., vol. ii. pl. 234. f. 13.

Hab. Gallapagos Islands; Cuming.

The white ribs in this shell appear in bold relief upon a bright rose-coloured ground.

Species 63. (Mus. Stainforth.)

PLEUROTOMA TUBERCULIFERA. *Pleur. testâ acuminato-fusiformi, apice acuto; anfractibus medio tuberculiferis, striatis, supernè concavis, fusco-fasciatis; canali mediocri; labro simplici, acuto, ab anfractu penultimo sinu lato separato.*

THE TUBERCULOUS PLEUROTOMA. Shell acuminately fusiform, apex sharp; whorls tuberculous in the middle, striated, concave and brown-banded above; canal middling; lip simple, acute, separated from the penultimate whorl by a broad sinus.

BRODERIP and SOWERBY, Zool. Journ., vol. iv. p. 378.

Hab. Isabella Island, Gulf of California; Belcher.

The whorls in this shell have a peculiar dark chestnut band above the tubercles, and a lighter divided one below them. It is not much unlike the *Pl. olivacea.*

Species 64. (Mus. Belcher.)

PLEUROTOMA INERMIS. *Pleur. testâ ovato-acuminatâ, inermi; anfractibus leviter convexis, cinereis, flammeolis fuscis, subtilissimis, undosis, longitudinaliter striatis.*

THE UNARMED PLEUROTOMA. Shell ovately acuminated, smooth; whorls slightly convex, ash-coloured, longitudinally striated with a succession of very fine, waved, flame-like lines.

HINDS, Pro. Zool. Soc., 1843.

Hab. Bay of Magdalena, California (found in mud at the depth of seven fathoms); Hinds.

I have not ventured to describe the anterior portion of this shell, because the specimen before me collected by Capt. Belcher, the only one that has yet been seen, has not arrived at maturity. It is very properly placed by Mr. Hinds in the genus *Pleurotoma*; for, although the lip is considerably broken, the very peculiar marking of the whorls fully indicates the previous existence of a sinus or fissure.

Species 65. (Mus. Cuming.)

PLEUROTOMA ALABASTER. *Pleur. testâ turritâ, intùs extùsque niveâ, roseo interdum leviter tinctâ, transversìm*

subtilissimè sulcatâ et striatâ; anfractibus longitudinaliter costatis, supernè subdepressis; sinu lato.

THE ALABASTER PLEUROTOMA. Shell turrited, snowy white within and without, sometimes faintly tinged with rose, transversely very finely grooved and striated; whorls longitudinally ribbed, somewhat depressed next the suture; sinus broad.

REEVE, Pro. Zool. Soc., 1843.

Hab. Island of Siquijor, Philippines (found in loose coral sand on the reefs at low water); Cuming.

The sculpture of this shell is exceedingly delicate, the cross grooves looking as if they had been graved with an etching point.

Species 66. (Mus. Dennison.)

PLEUROTOMA FLAVIDULA. *Pleur. testâ turrito-subulatâ, longitudinaliter subobliquè plicatâ, plicis anticè evanidis; transversim striatâ, striis super plicis nodulosis; canali brevi, subrecurvo; sinu lato.*

THE YELLOWISH PLEUROTOMA. Shell sharply turrited, longitudinally rather obliquely plaited, plaits disappearing anteriorly; transversely striated, striæ knobbed in passing over the plaits; canal short, slightly recurved; sinus broad.

LAMARCK, Anim. sans vert., vol. vii. p. 92.

CHEMNITZ, Conch., vol. xi. pl. 190. f. 1829 and 1830.

Hab. Chinese and Japanese Seas.

There is a striking variety of this shell of a dark brown colour, the form and general appearance of which are the same.

Species 67. (Mus. Walton.)

PLEUROTOMA SEMICOSTATA. *Pleur. testâ turritâ, albidâ, epidermide olivaceo-luteâ, corneâ, indutâ; anfractibus convexis, semicostatis, costis latis, supernè nodulosis; aperturâ ovatâ; labro simplici, sinu lato.*

THE HALF-RIBBED PLEUROTOMA. Shell turrited, white, covered with a horny olive-yellow epidermis; whorls convex, ribbed half-way, ribs broad, and nodulous at the upper extremity; aperture ovate; lip simple, sinus broad.

KIENER, Icon, p. 39. pl. 19. f. 1.

Hab. —— ?

This is probably the shell alluded to by Sowerby in his "Genera of Shells" as having all the appearance of a fresh-water *Melania*.

Species 68. (Mus. Cuming.)

PLEUROTOMA BUCCINOIDES. *Pleur. testâ turritâ, pallidè ferrugineâ, epidermide corneâ, fusco-nigricante, indutâ; anfractibus leviter convexis, longitudinaliter costellatâ, costellis supernè nodulosis, ante suturas terminatis; aperturâ basi emarginatâ.*

THE BUCCINUM-LIKE PLEUROTOMA. Shell turrited, pale rusty brown, covered with a dark horny blackish brown epidermis; whorls slightly convex, longitudinally ribbed, ribs with the upper extremity nodulous, terminating before the sutures; aperture with the base emarginated.

LAMARCK, Anim. sans vert., vol. vii. p. 94.

Boletus turbinatus, Martini.

Buccinum sinuatum, Born.

Buccinum phallus, Gmelin.

Hab. —— ?

This species, like the former, is evidently an inhabitant of fresh or brackish water, having the complete external character of a *Melania*.

Species 69. (Mus. Stainforth.)

PLEUROTOMA AURICULIFERA. *Pleur. testâ oblongo-ovatâ, subventricosâ, albidâ, sæpissimè unizonali; anfractibus supernè leviter angulatis, squamis grandibus complicatis, auriculi-formibus, distantibus, coronatis; anfractu ultimo serie tuberculorum fasciâque adustâ cincto.*

THE EARED PLEUROTOMA. Shell oblong-oval, rather ventricose, white, generally single banded; whorls slightly angulated round the upper part, which is coronated with large, distant, ear-shaped, folded scales; last whorl encircled with a row of tubercles and generally a single brown band.

LAMARCK, Anim. sans vert., vol. vii. p. 91.

Strombus lividus, Linnæus.

Clavatula auriculifera, Enc. Meth., pl. 439. f. 10 *a. b.*

Hab. Philippine Islands.

Specimens of this remarkable shell, of different ages, were collected by Mr. Cuming at several of the above-mentioned islands. The ear-shaped scales gradually increase in importance as the shell increases in growth.

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LIBRARY OF THE BOMBAY BRANCH OF THE ASIATIC SOCIETY

PLEUROTOMA.

PLATE IX.

Species 70. (Mus. Stainforth.)

PLEUROTOMA OWENII. *Pleur. testâ elongato-cylindraceâ, apice acuto, pallidè cinereâ; anfractibus convexis, striis et nodulorum seriebus duabus cingulatis, ultimo infrà subtilissimè noduloso-striatis; canali brevissimo.*

OWEN'S PLEUROTOMA. Shell elongately cylindrical, apex sharp, pale ash-colour; whorls convex, encircled with striæ and two rows of white nodules, lower portion of the last whorl striated with very fine nodules; canal very short.

GRAY, MSS. (private cabinet).

Hab. East Coast of Africa; Gray.

The specimen in Mr. Gray's cabinet is of unusually large size, at least one-third longer than that selected for illustration.

Species 71. (Mus. Hinds.)

PLEUROTOMA STROMBOIDES. *Pleur. testâ abbreviato-fusiformi, apice acuto, fulvâ; anfractibus medio angulatis, nodulis compressis ad angulum biseriatim cinctis, suprà concavis, lævibus, anfractu ultimo subalato, granoso, labro margine subincrassato; sinu lato; canali vix elongato, recurvo.*

THE STROMBUS-LIKE PLEUROTOMA. Shell shortly fusiform, apex sharp, yellowish; whorls angulated in the middle, encircled at the angle with a double row of compressed nodules, above the angle concave and smooth, last whorls slightly winged, lower portion granulated; lip rather thickened at the edge; sinus broad; canal a little elongated, recurved.

SOWERBY, Genera of Shells, *Pleurotoma*, f. 4.

Hab. Bay of Panama (found in mud at the depth of seven fathoms); Hinds,

There is always a small white callosity on the body-whorl of this shell.

Species 72. (Mus. Gray.)

PLEUROTOMA TUBERCULATA. *Pleur. testâ fusiformi, pallidè cinereo-olivaceâ; anfractibus supernè concavis, funiculo rubido-maculato cingulatis, medio tuberculatis, tuberculis interstitiis rubidis, infrà rotundatis, granulosis; canali subelongato.*

THE TUBERCULATED PLEUROTOMA. Shell fusiform, pale ashy olive-colour; upper portion of the whorls concave, encircled with a single reddish-brown spotted cord, middle portion tuberculated, interstices between the tubercles reddish brown, lower portion of the whorls rounded, granulated; canal rather long.

GRAY, Zool. Beech. Voy., p. 120.

Hab. ——?

The interstices between the granules are the same colour as between the tubercles.

Species 73. (Mus. Stainforth.)

PLEUROTOMA TENUIS. *Pleur. testâ fusiformi, tenui, fulvescente; anfractibus convexis, medio nodoso-carinatis, suprà lævibus, concavis, infrà striatis, longitudinaliter corrugato-costatis, costis irregulariter confluentibus; canali subelongato.*

THE THIN PLEUROTOMA. Shell fusiform, thin, yellowish; whorls convex, middle nodulously keeled; upper part concave smooth, lower part longitudinally striated, and wrinkle-ribbed, ribs irregularly flowing together; canal rather long.

GRAY, Ann. and Mag. Nat. Hist.

Pleurotoma corrugata, Kiener, &c.

Hab. New Guinea; Kiener.

I have seen this species with the wrinkle-ribbed peculiarity still more curiously developed than in the specimen here figured.

Species 74. (Mus. Cuming.)

PLEUROTOMA ZONATA. *Pleur. testâ subfusiformi, fuscescente; anfractibus convexis, longitudinaliter albicostatis, parte inferiori interstitiis fusco zonatis; canali breviusculo.*

THE ZONED PLEUROTOMA. Shell somewhat fusiform, brownish; whorls convex, longitudinally ribbed, ribs white, the lower portion of the interstices being distinctly zoned with dark brown; canal rather short.

GRAY, MSS. (private cabinet).

Hab. Singapore (found in sand at the depth of seven fathoms); Cuming.

I have only seen two specimens of this interesting

species, one in Mr. Gray's cabinet, and the other in that of Mr. Cuming.

Species 75. (Mus. Cuming.)

PLEUROTOMA REGIA. *Pleur. testâ elongato-turritâ, maculis grandibus albis et rubris eximiè tessellatâ; anfractibus medio nodulis biseriatim cinctis, suprà lævibus, concavis, infrà granulosis; sinu parvo; canali brevi, subrecurvo.*

THE ROYAL PLEUROTOMA. Shell elongately turrited, beautifully tessellated throughout with large spots of white and red; whorls encircled round the middle with a double row of nodules, concave and smooth above, granulated below; sinus small; canal short, a little recurved.

BECK, MSS. Mus. King of Denmark.

REEVE, Conch. Syst., vol. ii. p. 187. pl. 233. f. 7.

Hab. Amboyna.

This is an extremely pretty shell, and highly deserves the title appended to it in the King of Denmark's Museum, at Copenhagen, by my excellent friend Dr. Beck.

Species 76. (Mus. Cuming.)

PLEUROTOMA INCRASSATA. *Pleur. testâ acuminato-pyramidali, crassâ, nigricante; anfractibus prope suturam obsoletè carinatis, carinâ interruptâ, infrà longitudinaliter costellatis, costellis granosis, lineis elevatiusculis decussatis; labro prope marginem incrassato; sinu lato; canali brevi.*

THE THICKENED PLEUROTOMA. Shell acuminately pyramidal, thick, blackish; whorls obsoletely keeled near the suture, keel interrupted, longitudinally ribbed beneath, ribs grained and crossed with raised lines; lip thickened near the edge; sinus broad; canal short.

SOWERBY, Pro. Zool. Soc., 1833.

Pleurotoma Bottæ, Valenciennes.

Hab. Bay of Panama, &c. (found in sandy mud at the depth of from six to ten fathoms); Cuming.

I have no doubt but that this shell is the *Pleurotoma Bottæ* of Valenciennes, described and figured in Kiener's 'Iconographie des Coquilles vivantes.'

Species 77. (Mus. Stainforth.)

PLEUROTOMA ALBINA. *Pleur. testâ fusiformi-turritâ, albâ, decussatim striatâ, striis transversis subtilissimè rubido-punctatis; anfractibus medio plano-carinatis, carinâ maculis parvis rubidis quadratis equidistantibus ornatâ; canali elongato, gracili.*

THE LIME-WHITE PLEUROTOMA. Shell fusiformly turrited, white, decussately striated, transverse striæ painted with the finest imaginable reddish brown dots; whorls flatly keeled round the middle, keel ornamented with small square equidistant reddish brown spots; canal long and slender.

LAMARCK, Anim. sans vert., vol. vii. p. 96.

Hab. Island of Cerat, Molluccas; Hinds.

An extremely delicate shell, remarkable on account of the squareness and equidistant arrangement of the spots which ornament the flattened keel formed by the filling up of the labral slit.

Species 78. (Mus. Cuming.)

PLEUROTOMA DUPLICATA. *Pleur. testâ acuminato-turritâ, pallidâ, epidermide corneâ fuscâ indutâ; anfractibus supernè obsoletè unicarinatis, medio tuberculato-costatis, tuberculis lineis duabus elevatis regulariter decussatis, anfractu ultimo ubique lineato; canali brevi.*

THE DOUBLE-LINE PLEUROTOMA. Shell acuminately turrited, pale, covered with a dark horny epidermis; whorls obsoletely keeled round the upper part, tuberculously ribbed down the lower, tubercles regularly crossed with a pair of elevated lines, last whorl lineated throughout; canal short.

SOWERBY, Pro. Zool. Soc., 1843.

Hab. Puerto Portrero and Bay of Montija, Central America (found in sandy mud at the depth of ten fathoms); Cuming.

Species 79. (Mus. Cuming.)

PLEUROTOMA VENUSTA. *Pleur. testâ obeso-fusiformi, flavicante, fusco-maculatâ; anfractibus rotundatis, transversim multicostatis, obliquè maculatis, supernè depressis, maculis majoribus vividè pictis; canali elongato.*

THE COMELY PLEUROTOMA. Shell stoutly fusiform, yellowish, spotted with dark brown; whorls rounded, transversely many-ribbed, obliquely spotted, upper part depressed, vividly painted with larger spots; canal long.

REEVE, Pro. Zool. Soc., 1843.

Hab. Island of Siquijor, Philippines (found in coral sand on the reefs at low water); Cuming.

This highly interesting shell, which is at present unique in Mr. Cuming's collection, differs materially, both in form and in the colour and character of the marking, from any of its congeners.

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Sowerby del.

Specimens slightly magnified.

Reeve lith.

PLEUROTOMA.

PLATE X.

Species 80. (Mus. Belcher.)

PLEUROTOMA FELINA. *Pleur. testâ cylindraceo-oblongâ, albicante, fasciis rubidis curvatis, latis, subdistantibus, longitudinaliter pictâ; anfractibus convexis, transversè striatis, striis elevatiusculis; canali brevissimo.*

THE CAT PLEUROTOMA. Shell cylindrically oblong, white, longitudinally painted with rather distant, broad, festooned, reddish bands; whorls convex, transversely striated, striæ rather elevated, canal very short.

HINDS, Pro. Zool. Soc., 1843.

Hab. New Ireland (found in seven fathoms mud); Hinds.

A very characteristic species remarkable on account of the broad festooned bars of reddish brown which pass down the shell at intervals.

Species 81. (Mus. Petit.)

PLEUROTOMA SINISTRALIS. *Pleur. testâ fusiformi, acuminato-pyramidali, sinistrali, pallidè violaceâ; anfractibus convexis, decussatim striatis; sinu lato; canali brevi.*

THE SINISTRAL PLEUROTOMA. Shell fusiform, acuminately pyramidal, sinistral, pale violet colour; whorls convex, decussately striated; sinus broad; canal short.

PETIT, Guérin's Mag. de Zool., 1839, pl. 1.

Hab. West Coast of Africa, between Senegal and the equator.

This is the only left-handed species of *Pleurotoma* at present known.

Species 82. (Mus. Cuming.)

PLEUROTOMA EXIMIA. *Pleur. testâ gracilè fusiformi, albâ, anfractibus convexis, costis angustis longitudinalibus, striisque transversis elevatis, eximiè cancellatâ; sinu subindistincto; canali mediocri, leviter tortuoso.*

THE DELICATE PLEUROTOMA. Shell slenderly fusiform, white; whorls convex, delicately cancellated with narrow longitudinal ribs, and elevated transverse striæ; sinus rather indistinct; canal middling, slightly twisted.

REEVE, Pro. Zool. Soc., 1843.

Hab. Island of Masbate, Philippines (found under stones at low water); Cuming.

The canal of this Muriciform species, though somewhat indistinct, fully entitles it to a place amongst the *Pleurotomæ*.

Species 83. (Mus. Belcher.)

PLEUROTOMA GEMMATA. *Pleur. testâ elongatâ, gracillimè fusiformi, pallidè fuscâ; anfractibus numerosis, medio valdè carinatis, carinâ nodulis quadratis semipellucidis eximiè gemmatâ, supernè concavis, lineis duabus elevatis cingulatis, anfractu ultimo infernè multilineato; canali elongato.*

THE GEMMED PLEUROTOMA. Shell long, very slenderly fusiform, pale brown; whorls numerous, strongly keeled round the middle, keel delicately studded with square semi-transparent nodules; upper part of the whorls concave, encircled with two very distinct elevated lines, lower part of the last whorl lineated; canal long.

HINDS, Pro. Zool. Soc. 1843.

Hab. Gulf of Magdalena, California (found in sandy mud at the depth of seven fathoms); Hinds.

One specimen only of this very elegant shell was collected at the above place in H. M. S. *Sulphur*.

Species 84. (Mus. Cuming.)

PLEUROTOMA ALBIBALTEATA. *Pleur. testâ ovato-oblongâ, lutêâ, albibalteatâ, anfractibus convexis, transversè lineatis, longitudinaliter noduloso-costatis; labro incrassato, sinu parvo; canali brevi, recurvo.*

THE WHITE-BELTED PLEUROTOMA. Shell ovately oblong, yellow, with a single white belt round the middle of each whorl; whorls convex, lineated transversely, nodulously ribbed longitudinally; lip thickened, sinus small; canal short, recurved.

REEVE, Pro. Zool. Soc. 1843.

Hab. Island of Ticao, Philippines (found in sand at the depth of six fathoms); Cuming.

The white belt which passes round each of the whorls of this shell is of a peculiarly opake nature. The ribs are more distant from each other in some specimens than in others, and the lower part of the last whorl is occasionally stained with dark brown.

Species 85. (Mus. Cuming.)

PLEUROTOMA TRITONOIDES. *Pleur. testâ subovali, apice acuto, fulvâ, pallidè albifasciatâ; anfractibus convexis, costis longitudinalibus, subtilissimè nodulosis, lineis transversis elevatis eximiè cancellatis; labro incrassato, sinu parvo; canali brevi, subrecurvo.*

THE TRITON-LIKE PLEUROTOMA. Shell somewhat oval, apex sharp, yellow, palely banded with white; whorls convex, delicately cancellated with very finely nodulous longitudinal ribs and elevated transverse striæ; lip thickened, sinus small; canal short, a little recurved.

REEVE, Pro. Zool. Soc., 1843.

Hab. Bais, Island of Negros, Philippines (found in coral sand at the depth of seven fathoms); Cuming.

This shell is of a duller and more uniform colour than the preceding; the last whorl is more ventricose, and the longitudinal ribs are finer and more numerous.

Species 86. (Mus. Cuming.)

PLEUROTOMA ABBREVIATA. *Pleur. testâ abbreviato-fusiformi, cæruleo-albâ, nigro maculatâ et punctatâ; anfractibus medio angulato-carinatis, carinâ medio partitâ, supernè depressis, funiculo maximo nigro-maculato cingulatis, infernè multifuniculatis, funiculis minoribus nigro lineatis et punctatis; canali vix elongato.*

THE SHORTENED PLEUROTOMA. Shell of a shortened fusiform shape, bluish white, spotted and dotted with black; whorls angular, keeled round the middle, keel divided, upper portion of the whorls depressed, encircled near the suture with a stout black-spotted cord, lower portion encircled with numerous smaller cords, painted with short black lines and dots; canal scarcely elongated.

REEVE, Pro. Zool. Soc., 1843.

Hab. Island of Masbate, Philippines (found on the reefs at low water); Cuming.

A very interesting species, which looks at first sight like a broken portion of the *Pl. tigrina.* A number of specimens were collected by Mr. Cuming at the above-mentioned island.

Species 87. (Mus. Cuming.)

PLEUROTOMA BIJUBATA. *Pleur. testâ cylindraceo-pyramidali, fuscâ, fuscescente carinatâ; anfractibus convexis, equidistanter carinatis, carinis duabus centralibus jubatis; aperturâ brevi; canali brevissimo.*

THE DOUBLE-CRESTED PLEUROTOMA. Shell cylindrically pyramidal, brown, keeled with lighter reddish brown; whorls convex, equidistantly keeled, the two central keels crested or festooned; aperture short; canal very short.

REEVE, Pro. Zool. Soc., 1843.

Hab. Island of Bureas, Philippines (found under stones at low water); Cuming.

Of the two crested keels which encircle this very characteristic species, the upper one is the more faintly developed.

Species 88. (Mus. Cuming.)

PLEUROTOMA PLANILABRUM. *Pleur. testâ ovato-oblongâ, apice acuto, rubido-fuscâ; anfractibus convexis, transversè lineatis, longitudinaliter costatis, costis ferè obsoletis; aperturâ oblongâ, labro plano, rubido, intùs denticulato; canali brevissimo.*

THE FLAT-LIP PLEUROTOMA. Shell ovately oblong, apex sharp, reddish brown; whorls convex, lineated transversely, ribbed longitudinally, ribs almost obsolete; aperture oblong, lip flat, red, and denticulated within; canal very short.

REEVE, Pro. Zool. Soc., 1843.

Hab. Sibonga, Island of Zebu, Philippines (found under stones at low water); Cuming.

The posterior extremity of the lip in this shell is acuminated to a sharp point.

Species 89. (Mus. Cuming.)

PLEUROTOMA CORUSCA. *Pleur. testâ subpyramidali, valdè politâ; anfractibus supernè planis, fusco alboque nebulosis, infernè leviter prominentioribus, punctis fuscis irregularibus cingulatis, anfractu ultimo punctorum seriebus duabus cingulato; aperturâ brevi; canali brevissimo.*

THE GLITTERING PLEUROTOMA. Shell rather pyramidal, highly polished; upper portion of the whorls flat, clouded with reddish brown and white, lower portion more prominent, encircled with a row of irregular reddish brown dots, last whorl encircled with two rows of dots; aperture short; canal very short.

REEVE, Pro. Zool. Soc., 1843.

Hab. Island of Capul, Philippines; Cuming.

Two specimens only of this shell were found by Mr. Cuming on the reefs at the above-mentioned island.

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96b

96c

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Sowerby del. lith. et pinxt

PLEUROTOMA.

PLATE XI.

Species 90. (Mus. Cuming.)

PLEUROTOMA GRANULOSA. *Pleur. testâ turrito-pyramidali; anfractibus prope suturam lævibus, tumidiusculis, in medio rotundato-costatis, costis lineato-decussatis, lineis decussantibus, minutissimè granulosis; aperturâ brevi; canali brevi, lato; sinu rotundato.*

THE GRANULOUS PLEUROTOMA. Shell turrited, pyramidal, light brown; whorls smooth and rather swollen near the suture, rotundately ribbed in the middle, ribs crossed with very finely granulated lines; aperture short, broad; sinus rounded.

SOWERBY, Pro. Zool. Soc., 1833.

Hab. Bays of Montija and Panama (found in sand at the depth of eight fathoms); Cuming.

The granules which characterize this shell are scarcely perceptible to the naked eye.

Species 91. (Mus. Cuming.)

PLEUROTOMA RUSTICA. *Pleur. testâ rudi, crassiusculâ, oblongo-pyramidali, fusco-nigricante; anfractibus prope suturam unicarinatis, infrà longitudinaliter costatis, costis numerosis, acutis, ultimi costis lineato-decussatis, decurrentibus; aperturâ brevi; canali brevissimo, sinu rotundato.*

THE RUSTIC PLEUROTOMA. Shell rude, rather thick, oblong, pyramidal, brownish black; whorls keeled near the suture, longitudinally ribbed below, ribs numerous, sharp; ribs of the last whorl flowing down, crossed with lines; aperture short; canal very short; sinus rounded.

SOWERBY, Pro. Zool. Soc., 1843.

Hab. Xipixapi, West Columbia (found under stones); Cuming.

This shell is of a more solid cylindrical form than the *P. nigerrima*, to which it is nearly allied, and the aperture is much the shorter.

Species 92. (Mus. Cuming.)

PLEUROTOMA UNICOLOR. *Pleur. testâ crassiusculâ, oblongâ, pyramidali, pallidè fusco-nigricante; anfractibus lævibus, prope suturam serie unicâ granularum ornatâ, infrà longitudinaliter costatis; aperturâ brevi; canali brevissimo; sinu rotundato.*

THE UNIFORMLY-COLOURED PLEUROTOMA. Shell rather thick, oblong, pyramidal, pale brownish black; whorls smooth, encircled with a single row of granules near the suture, longitudinally ribbed below; aperture short; canal very short; sinus rounded.

SOWERBY, Pro. Zool. Soc., 1843.

Hab. Panama (dredged from a sandy muddy floor at the depth of about eight fathoms); Cuming.

A very dark horny-looking shell.

Species 93. (Mus. Harford.)

PLEUROTOMA HARFORDIANA. *Pleur. testâ obeso-pyramidali; anfractibus nigerrimis, in medio luteo-balteatis, convexis, transversim subtilissimè striatis, supernè depressiusculis, serie unicâ nodulorum ornatâ, infrà noduloso-costatis; aperturâ breviusculâ; sinu parvo, rotundato.*

HARFORD'S PLEUROTOMA. Shell stoutly pyramidal; whorls very black, girt round the middle with a narrow yellow belt, convex, transversely very finely striated; upper part of the whorls rather depressed, encircled with a row of small nodules, below nodulously ribbed; aperture rather short; sinus small, rounded.

REEVE, Pro. Zool. Soc., 1843.

Hab. —— ?

I have much pleasure in dedicating this species to its possessor, an intelligent conchologist, and one highly worthy of remembrance. The yellow belt which passes round the middle of each whorl has a strikingly neat appearance.

Species 94. (Mus. Stainforth.)

PLEUROTOMA PERRONII. *Pleur. testâ fusiformi, turritâ, lævigatâ, pallidè luteâ; anfractibus planis, supernè leviter angulatis, ultimo infernè coarctato, transversim lirato, liris regularibus, subdistantibus; sinu subcentrali; canali subelongato, recto.*

PERRON'S PLEUROTOMA. Shell fusiform, turrited, rather smooth, pale yellow; whorls flat, slightly angulated round the upper part, lower portion of the last whorl contracted and transversely ridged, ridges regular, and somewhat distant from each

other; sinus nearly central; canal straight and rather long.

REEVE, Pro. Zool. Soc., 1843.

Murex Perron, Chemnitz, Conch., vol. x. pl. 164. f. 1573.

Hab. —— ?

This interesting shell has been confounded by Lamarck with the *P. spirata* (vide Pl. VI. Sp. 44.). It differs from that species in being more erect and fusiform, in the sutures of the whorls being less deeply channeled, and in the lower portion of the last whorl being crossed with about four or five narrow, well-developed ridges.

Species 95. (Mus. Cuming.)

PLEUROTOMA FUNICULATA. *Pleur. testâ subobeso-fusiformi, turritâ, pallidè cinereâ, epidermide olivaceo-viridescente indutâ; anfractibus supernè concavo-depressis, lævibus, in medio nodosis, funiculis aut liris binis cingulatis, anfractu ultimo infernè nodulosolirato; sinu lato; canali breviusculo.*

THE CORDED PLEUROTOMA. Shell rather stoutly fusiform, turrited, pale ash-colour, covered with an olive-green epidermis; upper part of the whorls concavely depressed, smooth, middle knobbed, and encircled with a pair of cords or ridges, lower portion of the last whorl nodulously ridged; sinus broad; canal rather short.

VALENCIENNES MSS., Mus. Jardin des Plantes.

KIENER, Icon., p. 24. pl. 16. f. 1.

Hab. Gulf of California (found in sandy mud); Babb, R.N.

Having obtained a drawing and careful examination of this shell described and figured by Kiener, I find it to be very distinct from the *P. olivacea*, to which I incautiously ventured to refer it on the publication of that species (vide Pl. IV. Sp. 27.).

Species 96.

PLEUROTOMA LINEATA. *Pleur. testâ clavato-fusiformi, solidâ, spirâ elatâ, mucronatâ; luteolâ vel castaneâ, lineis longitudinalibus, undulato-angulatis, spadiceis, plus minusve vividè pictâ; canali longiusculo; columellâ supernè callosâ.*

THE LINEATED PLEUROTOMA. Shell clavately fusiform, solid, spire raised, pointed; yellowish or chestnut colour, more or less vividly painted with waved, angular, brown lines; canal rather long; a solid white callosity on the body whorl.

LAMARCK, Anim. sans vert., vol. vii. p. 93.

Variety α. (Fig. 96 *b*, Mus. Stainforth.)

Testa luteola, lineis vividis, latis.

Shell yellowish, lines vivid and broad.

Variety β. (Fig. 96 *c*, Mus. Hankey.)

Testa medio coarctata, castanea, lineis subindistinctis.

Shell contracted in the middle, dark chestnut colour, lines rather indistinct.

Variety γ. (Fig. 96 *a*, Mus. Stainforth.)

Testa gracilior, lineis numerosis, subtilissimis.

Shell more slender, lines numerous, very fine.

Hab. Cabenda, west coast of Africa (found at the depth of five fathoms in mud washed down by the waters of the Congo); Hankey.

The club-like peculiarity of this shell arises from the solid colourless matter which the animal deposits in its course of growth for the lodgement of one whorl upon the other.

Species 97. (Mus. Gray.)

PLEUROTOMA UMBILICATA. *Pleur. testâ oblongo-turritâ, pallidè luteolâ, basi umbilicatâ, spirâ acuminatâ; anfractibus transversim lineariter insculptis, supernè depressis, infrà longitudinaliter costatis, costis prominentibus, subdistantibus; labro sinuato-effuso, sinu lato; canali brevissimo.*

THE UMBILICATED PLEUROTOMA. Shell oblong, turrited, pale yellowish or stone-colour, base umbilicated, spire acuminated; whorls linearly engraved across, upper part depressed, below longitudinally ribbed, ribs prominent, rather distant; lip sinuately spread, sinus broad; canal very short.

Drillia umbilicata, Gray MSS. (private cabinet).

Hab. —— ?

The ribs of this shell, which is very peculiarly umbilicated, assume almost the form of tubercles.

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Sowerby del.

Reeve lith.

PLEUROTOMA.

PLATE XII.

Species 98. (Mus. Cuming.)

PLEUROTOMA ASTRICTA. *Pleur. testâ cylindraceo-oblongâ, spiraliter sulcatâ; anfractibus convexis, pallidè luteolis, tricarinulatis, carinulis subobsoletis, carinulâ mediâ rubido-fusco alboque articulato eximiè astrictâ; aperturâ canalique brevibus.*

THE LACED PLEUROTOMA. Shell cylindrically oblong, spirally grooved; whorls convex, pale yellow, tricarinated, keels almost obsolete, middle keel delicately laced with an articulated chain of white and reddish brown; canal and aperture short.

Pleurotoma interrupta, Sowerby, Pro. Zool. Soc., 1833.

Hab. Island of Annaa (Chain Island), found under coral on the reefs; Cuming.

I impose a new title upon this species in consequence of the word *interrupta* having been pre-occupied by Lamarck. It is at present unique in Mr. Cuming's collection.

Species 99. (Mus. Cuming.)

PLEUROTOMA CINCTA. *Pleur. testâ ovato-subcylindraceâ, fulvâ, apice subulato-pyramidali; anfractibus transversim bicarinulatis, carinulâ crenatâ interveniente, anfractu ultimo carinato per totum; aperturâ canalique brevibus.*

THE ENCIRCLED PLEUROTOMA. Shell ovately cylindrical, yellow, apex subulately pyramidal; whorls encircled with two rounded keels with a very fine crenated or beaded keel running between, last whorl keeled throughout; canal and aperture short.

LAMARCK, Anim. sans vert., vol. vii. p. 92.

Pleurotoma modesta, Sowerby, Pro. Zool. Soc., 1833.

Hab. Real Llejos and Island of Annaa (dredged from sandy mud at the depth of eight fathoms); Cuming.

After carefully examining the identical shells described by Lamarck and Sowerby under the respective titles of *cincta* and *modesta,* I am unable to discover any specific difference between them.

Species 100. (Mus. Cuming.)

PLEUROTOMA ATERRIMA. *Pleur. testâ acuminato-pyramidali, aterrimâ; anfractibus supernè unicarinatis, carinâ prominente infrà crenulatis; anfractu ultimo serie unicâ medianâ nodulorum, infrà seriebus duabus granularum ornato; sinu latiusculo; canali brevissimo.*

THE VERY BLACK PLEUROTOMA. Shell acuminately pyramidal, very black; upper part of the whorls encircled with a single prominent keel, lower portion crenulated, last whorl ornamented with one row of nodules and two rows of granules; sinus rather broad; canal very short.

SOWERBY, Pro. Zool. Soc., 1833.

Hab. Monte Christi, West Columbia (found under stones); Cuming.

This species may be easily recognised by the rude blunted keel which spirally entwines the shell.

Species 101. (Mus. Deshayes.)

PLEUROTOMA PLUTEATA. *Pleur. testâ fusiformi, gracili, fulvâ; anfractibus convexis, pluteo supernè ornatis, medio nodulis albidis catenulatis, infrà subtilissimè sulcatis; sinu lato; canali elongato.*

THE SHELVED PLEUROTOMA. Shell fusiform, slender, yellowish; whorls convex, upper part ornamented with a kind of shelf or parapet, middle delicately chained with whitish nodules, lower portion very finely grooved; sinus broad; canal long.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

The shelf which passes round the upper portion of the whorls is not less characteristic of this species than the delicate chain of white nodules which encompass the centre.

Species 102. (Mus. Cuming.)

PLEUROTOMA NIGERRIMA. *Pleur. testâ acuminato-pyramidali, nigerrimâ; anfractibus supernè planulatis, prope suturam subnodosis, infrà transversim concinnè striatis, longitudinaliter costatis, costis arcuatis, subdistantibus; aperturâ oblongâ, supernè callositate munitâ; canali longiusculo, subreflexo.*

THE JET-BLACK PLEUROTOMA. Shell acuminately pyramidal, jet-black; upper part of the whorls flat, slightly knobbed near the suture, lower portion finely striated transversely, ribbed longitudinally, ribs curved and rather wide apart; aperture oblong; canal rather long and a little reflected.

SOWERBY, Pro. Zool. Soc., 1833.

Testa callositate in cornu brevi, quasi producto.

Shell with the callosity produced, as it were, into a short horn.

Pleurotoma cornuta, Sowerby, Pro. Zool. Soc., 1833.

Hab. Panama and Bay of Caraccas (dredged from sandy mud at the depth of ten fathoms); Cuming.

The callosity and reflexion of the canal serve chiefly to distinguish this species.

Species 103. (Mus. Cuming.)

PLEUROTOMA BICANALIFERA. *Pleur. testâ turritâ, gracili, fulvâ; anfractibus prope suturam concavis, lævibus, infrà longitudinaliter costellatis, costellis graniferis, lineis elevatis, decussatis; aperturâ oblongâ; canali labroque reflexis; sinu lato, rotundato, quasi canaliculato.*

THE TWO-CANAL PLEUROTOMA. Shell turrited, slender, yellowish; whorls concave and smooth near the suture, longitudinally ribbed below, ribs small, granular, and crossed with elevated lines; aperture oblong; canal and lip reflected; sinus broad, rounded, channeled as it were.

SOWERBY, Pro. Zool. Soc., 1833.

Hab. Bay of Montija, Central America (dredged from sandy mud at the depth of ten fathoms); Cuming.

I cannot very highly appreciate the specific title of this shell, because the technical value of the word "canal," as applied to the base of the shell, is in great measure injured when applied by analogy to a channeled sinus.

Species 104. (Mus. Gray.)

PLEUROTOMA CALLOSA. *Pleur. testâ oblongo-turritâ, fuscescente; anfractibus transversim striatis, supernè depressis, infrà longitudinaliter costellatis, costellis numerosis, subobsoletis; aperturâ oblongâ; labro columellari calloso; canali brevissimo.*

THE CALLOUS PLEUROTOMA. Shell oblong, turrited, brownish; whorls transversely striated, upper part depressed, longitudinally ribbed below, ribs small, numerous and somewhat obsolete; aperture oblong; columellar lip callous; canal very short.

VALENCIENNES MSS., Mus. Jardin des Plantes.

KIENER, Icon., p. 50. pl. 18. f. 1.

Hab. —— ?

A solid heavy-looking shell, remarkable on account of the callous development of the columellar lip.

Species 105. (Mus. Cuming.)

PLEUROTOMA HEXAGONA. *Pleur. testâ acuminato-pyramidali, rubido-fuscâ; anfractibus hexagonis, subtilissimè striatis, tuberculosis, tuberculis per series sex obliquè ordinatis; aperturâ subovatâ; sinu lato; canali breviusculo.*

THE HEXAGONAL PLEUROTOMA. Shell sharply pyramidal, reddish brown; whorls hexagonal, very finely striated, tuberculated, tubercles ranging down the shell in six oblique rows; aperture nearly oval; sinus broad; canal rather short.

SOWERBY, Pro. Zool. Soc., 1833.

Hab. Guacomayo, Central America (dredged from sandy mud at the depth of thirteen fathoms); Cuming.

I have only seen two specimens of this species, one collected by Mr. Cuming, the other by Captain Belcher.

Species 106. (Mus. Cuming.)

PLEUROTOMA CLAVULUS. *Pleur. testâ subulatâ, lævi, albâ, nigro-variegatâ, infernè incrassatâ; anfractibus plano-convexis, suturis subindistinctis; aperturâ ovali; labro externo, incrassato, reflexo; sinu subcirculari; canali brevissimo, paululum recurvo.*

THE HOB-NAIL PLEUROTOMA. Shell subulate, smooth, white, variegated with black, lower part thickened; whorls flatly convex, sutures somewhat indistinct; aperture oval; outer lip thickened, reflected; sinus nearly circular; canal very short, a little recurved.

SOWERBY, Pro. Zool. Soc., 1833.

Hab. Bay of Montija, Central America (found in sandy mud at the depth of seventeen fathoms); Cuming.

A very peculiar and distinct species, accurately represented in the accompanying plate.

Species 107. (Mus. Stainforth.)

PLEUROTOMA MYSTICA. *Pleur. testâ abbreviato-fusiformi, rubido-fuscâ; anfractibus supernè concavis, striatis, infrà angulatis, tuberculis albis, connatis, ad angulum acutè carinatis; anfractu ultimo infernè seriebus plurimis nodulorum cingulato.*

THE MYSTICAL PLEUROTOMA. Shell shortly fusiform, reddish brown; whorls concave and striated round the upper part, angulated below, sharply keeled at the angle with white connected tubercles; last whorl encircled round the lower part with several rows of nodules.

REEVE, Pro. Zool. Soc., 1843.

Hab. —— ?

Chiefly distinguished by the white turrited keel.

108

109 a

109 b

110 a

111 a

111 b

110 b

112 a

112 b

113

Sowerby del lith et pinx.t

PLEUROTOMA.

PLATE XIII.

Species 108. (Mus. Cuming.)

PLEUROTOMA VAUQUELINI. *Pleur. testâ parvâ, subturritâ, lævi, pallidè flavescente, longitudinaliter costatâ, costis tumidis, subdistantibus, fulvo sparsim et obscurè punctatis; anfractibus sex, supernè angulatis; labro tumido, intus acuto; canali brevi.*

VAUQUELIN'S PLEUROTOMA. Shell small, slightly turreted, smooth, pale yellow, longitudinally ribbed, ribs swollen, rather distant from each, and painted with scattered and obscure yellowish-brown dots; whorls six in number, angulated at the upper part; lip swollen, sharp inwardly; canal short.

PAYRANDEAU, Moll. de Corse, p. 145. pl. 7. f. 14 & 15.

PHILIPPI, Enum. Moll. Siciliæ, pl. 11. f. 19.

KIENER, Icon. Coq. viv., pl. 26. f. 2.

Hab. Mediterranean, Coast of Sicily, &c.

Payrandeau describes the last whorl only of this shell as being dotted; the dots, however, which are confined to the ribs, appear throughout the shell, and dashed in a peculiar manner around the angle. In the specimen before me, received by Mr. Cuming from M. Philippi, and which is in excellent condition, the interstices between the ribs are almost colourless.

Species 109. (Fig. *a* & *b*, Mus. Cuming.)

PLEUROTOMA PHILIPPINENSIS. *Pleur. testâ ovato-turritâ, ventricosâ, subpellucidâ, albidâ; anfractibus sex septemve, longitudinaliter costatis, costis eximiis, subcompressis, subdistantibus, nigro aut fusco alboque variè pictâ; transversim liratis, liris minutis, subcontiguis, numerosis; columellâ subtortuosâ; aperturâ ovatâ, amplâ; canali brevissimo.*

THE PHILIPPINE PLEUROTOMA. Shell ovately turreted, ventricose, rather transparent, white; whorls six or seven in number, longitudinally ribbed, ribs very delicate, rather compressed, somewhat distant from each other, and variously painted with black or brown and white; transversely ridged, ridges minute, numerous and rather close together; columella a little twisted; aperture ovate, large; canal very short.

REEVE, Pro. Zool. Soc., 1843.

Hab. Islands of Masbate and Luzon, Philippines (found under stones at low water); Cuming.

It is impossible to do justice, either by figure or description, to this very delicate and beautiful species, the chief peculiarity of which is the black and opake white irregularly-variegated blotching of the ribs. Several specimens were collected by Mr. Cuming at the above-mentioned islands, varying more or less in the number and proximity of their ribs: one or two specimens have as many as sixteen ribs on the last whorl,—twelve to fourteen is the average number.

Species 110. (Fig. *a* & *b*, Mus. Cuming.)

PLEUROTOMA CUMINGII. *Pleur. testâ ovato-elongatâ, subturritâ, pallidè rufo-stramineâ, maculis parvis, saturatioribus, striisque albidis elevatis equidistantibus transversis ornatâ; anfractibus septem octove, longitudinaliter costatis, costis leviter nodulosis, supernè et infernè evanidis; columellâ spiraliter plicatâ; canali brevissimo, leviter recurvo; labro tenui, acuto, sinu parvo, distincto.*

CUMING'S PLEUROTOMA. Shell ovately elongated, somewhat turreted, pale reddish straw-colour, ornamented with small spots of a deeper colour, and a number of white, transverse, equidistant, raised striæ; whorls seven or eight in number, longitudinally ribbed, ribs slightly nodulous, fading below, and near the suture; columella spirally plaited; canal very short and slightly recurved; lip thin, acute, sinus small and distinct.

Buccinum Cumingii, Powis, Pro. Zool. Soc., 1835.

Hab. Grimwood's Isle, Pacific Ocean (found on the sands); Cuming.

This and the two following species belong to a section of Pleurotomæ, which exhibit all the characters of the Buccina excepting that which entitles them to be Pleurotomæ. The labral sinus in this species is distinct though small, and its progress may be traced throughout the shell by the sinuated striæ which mark that portion of each whorl next the suture.

Species 111. (Fig. *a* & *b*, Mus. Cuming.)

PLEUROTOMA RISSOIDES. *Pleur. testâ elongato-ovali, lævi, nitente, semipellucidâ, albicante, fulvo pallidissimè nebulosè strigatâ; anfractibus septem, tribus longitudinaliter plicatis; apice rubello; columellâ*

spiraliter tortuosâ; canali brevissimo, leviter recurvo; labro subincrassato, intus eximiè denticulato, sinu parvo, distincto.

The Rissoa-like Pleurotoma. Shell elongately oval, smooth, shining, semitransparent, whitish, washed with clouded yellow streaks; whorls seven in number, the first three longitudinally plaited; apex pink; columella spirally twisted; canal very short, slightly recurved; lip rather thickened, delicately denticulated within, sinus small, distinct.

Reeve, Pro. Zool. Soc., 1843.

Hab. Island of Ticao, Philippines (found on the reefs); Cuming.

This species reminds me somewhat of the *Rissoa deformis*; the first whorl or two are plaited as in that shell, the surface is moreover smooth and shining, and they bear a general resemblance to each other in size. The apex of this shell is peculiar in being pink, whilst there is not the least indication of that colour in any other part.

Species 112. (Fig. *a* & *b*, Mus. Cuming.)

Pleurotoma Boholensis. *Pleur. testâ subelongatâ, tenui, subpellucidâ, albidâ, fulvo subindistinctè virgatâ; anfractibus octo, transversim lineatis et liratis, striis quoque subtilissimè reticulatis; columellâ spiraliter tortuosâ; canali brevissimo, paululum recurvo; labro simplici, acuto, sinu parvo.*

The Bohol Pleurotoma. Shell rather elongated, thin, somewhat transparent, whitish, rather indistinctly streaked or waved with yellow; whorls eight in number, transversely lineated and ridged, very finely reticulated also with striæ; columella spirally twisted; canal very short, a little recurved; lip simple, sharp, sinus small.

Reeve, Pro. Zool. Soc., 1843.

Hab. Island of Bohol, Philippines (found under stones on the reefs at low water); Cuming.

This shell, which is of a much thinner and slighter composition than either of the two preceding ones, is very finely reticulated over with striæ; and it has a number of lines and ridges running transversely across the whorls, but none longitudinally.

Species 113. (Mus. Cuming.)

Pleurotoma unizonalis. *Pleur. testâ ovatâ, subturritâ, albido-griseâ, anfractu ultimo zonâ olivaceo-fuscâ cincto; anfractibus longitudinaliter costatis, costis in medio tuberculatis, supernè evanidis; columellâ arcuatâ, supernè callositate munitâ; aperturâ ovali, fauce olivaceo-fuscâ; canali brevissimo.*

The zoned Pleurotoma. Shell ovate, somewhat turreted, greyish-white, last whorl encircled with a broad, distinct, olive-brown zone; whorls longitudinally ribbed, ribs tuberculated in the middle, disappearing before they reach the suture; columella arched, upper part furnished with a callosity; aperture oval, interior olive-brown; canal very short.

Lamarck, Anim. sans vert., vol. vii. p. 92.

Kiener, Icon. Coq. viv., pl. 22. f. 2.

Hab. Island of Masbate, Philippines (found on the reefs at low water); Cuming.

In the figure above referred to, the ribs appear to retain their greyish-white colour in passing through the olive-brown zone; this is not the case in the specimen before me, and I conclude therefore that the species varies in this respect.

114

115 a

116

117 a

118 a

115 b

117 b

118 b

118 c

119

ROYAL ASIATIC SOCIETY — LIBRARY OF THE BOMBAY BRANCH OF THE

Sowerby del. lith. et print.

(Specimens slightly magnified.)

PLEUROTOMA.

PLATE XIV.

Species 114. (Mus. Cuming.)

PLEUROTOMA GRACILENTA. *Pleur. testâ gracillimè fusiformi, fulvâ, anfractibus convexis, longitudinaliter costellatis, costellis leviter nodulosis, striis elevatiusculis transversis decussatis; labro subflexuoso, sinu lato; canali breviusculo.*

THE SLIM PLEUROTOMA. Shell slenderly fusiform, yellowish or pale brown; whorls convex, longitudinally ribbed, ribs small and slightly nodulous, crossed by rather elevated transverse lines; lip a little flexuous, sinus broad; canal rather short.

REEVE, Pro. Zool. Soc., 1843.

Hab. Loay, Island of Bohol, Philippines (dredged from sandy mud at the depth of seventeen fathoms); Cuming.

A shell of simple character, unlike any hitherto-described species, though not presenting any very striking peculiarity.

Species 115. (Fig. *a* & *b*, Mus. Cuming.)

PLEUROTOMA PESSULATA. *Pleur. testâ subacuto-fusiformi, fulvâ vel cinereâ, anfractibus leviter convexis, longitudinaliter costatis, costis subdistantibus, striis transversis subobsoletis decussatis; labro tenui, sinu parvo; canali breviusculo, subrecurvo.*

THE BARRED PLEUROTOMA. Shell rather sharply fusiform, yellow or ash-colour; whorls slightly convex, longitudinally ribbed; ribs rather distant, crossed with somewhat obsolete transverse striæ; lip thin, sinus small; canal rather short, a little recurved.

REEVE, Pro. Zool. Soc., 1843.

Hab. Bolinao, Island of Luzon, Philippines (dredged from sandy mud at the depth of ten fathoms); Cuming.

Although the ribs in this species are comparatively distant from each other, they vary considerably in this respect in different individuals; the more elongated the shell, the closer the ribs, as shown by the specimens here figured.

Species 116. (Mus. Cuming.)

PLEUROTOMA CONTRACTA. *Pleur. testâ elongato-ovatâ, albidâ; anfractibus plano-convexis, supernè contractis, costellis longitudinalibus numerosis, striisque transversis elevatis eximiè reticulatis; sinu lato, canali brevi.*

THE CONTRACTED PLEUROTOMA. Shell elongately oval, whitish; whorls flatly convex, contracted round the upper part, delicately reticulated with numerous small longitudinal ribs and elevated transverse striæ; sinus broad, canal short.

REEVE, Pro. Zool. Soc., 1843.

Hab. Cagayan, province of Misamis, island of Mindanao, Philippines (dredged from sandy mud at the depth of twenty-five fathoms); Cuming.

This species may be recognised by the peculiar contraction of the whorls near the suture; the sculpture is not much unlike that of the *C. gracilenta.*

Species 117. (Mus. Cuming.)

PLEUROTOMA CEDO-NULLI. *Pleur. testâ lanceolato-fusiformi, eximiè turritâ, apice acuto; griseo-albicante; anfractibus in medio valdè carinatis, carinâ compressâ, pereleganter diadematâ; sinu amplo, canali longissimo.*

THE MATCHLESS PLEUROTOMA. Shell lanceolately fusiform, delicately turreted, apex sharp; greyish-white; whorls strongly keeled round the middle, keel compressed, and very elegantly coronated with a diadem of sharp triangular appendages like flattened scales; sinus large, canal very long.

REEVE, Pro. Zool. Soc., 1843.

Hab. Bay of Panama (found in sandy mud at the depth of ten fathoms); Cuming.

Although this beautiful little shell has not reached its mature growth, I do not hesitate to publish it as a new species; the curious diadem of sharp flattened processes, which forms so striking a peculiarity, is somewhat like that of the *Fusus pagodus*, Lesson, figured by Kiener, pl. 5. f. 2. The sinus is rather large, and the sinuated striæ on the upper part of the whorls distinctly exhibit the traces of its earlier formation throughout their several volutions.

Species 118. (Fig. *a*, *b* & *c*, Mus. Cuming.)

PLEUROTOMA CRASSILABRUM. *Pleur. testâ ovato-turritâ, flavicante, fusco cæruleoque variè zonatâ; anfractibus convexis, supernè lævibus, infra tuberculato-costatis,*

costis striis transversis elevatiusculis decussatis; aperturâ brevi, subrotundatâ; canali brevi, subtortuoso; labro valdè incrassato, varicoso, intus acuto, sinu rotundato.

THE THICK-LIPPED PLEUROTOMA. Shell ovately turreted, yellowish, variously zoned with blue and brown; whorls convex, smooth near the suture, tubercularly ribbed beneath, ribs crossed with rather elevated transverse striæ; aperture short, rather rounded; canal short, rather twisted; lip very much thickened, swollen, sharp within, sinus rounded.

REEVE, Pro. Zool. Soc., 1843.

Hab. Island of Ticao, Philippines (found on the reefs); Cuming.

Variety β. (Fig. 118 *a*.)

Testa incolorata, striis transversis ferè obsoletis.

Shell without colour, transverse striæ nearly obsolete.

Hab. Island of Masbate, Philippines (dredged from sandy mud at the depth of seven fathoms); Cuming.

The blue and brown colouring of the first variety is very conspicuous between the ribs. The var. β, which is colourless, seems to have a thin epidermis upon it.

Species 119. (Mus. Cuming.)

PLEUROTOMA HINDSII. *Pleur. testâ ovatâ, subinflatâ, albidâ, fuscescente pallidè variegatâ; anfractibus costis duabus, ultimo costis quatuor, distantibus, cingulatis, costellis numerosis, compressis, eximiè cancellatis; aperturâ ovatâ; canali brevi.*

HINDS'S PLEUROTOMA. Shell ovate, rather inflated, white, faintly variegated with pale brown; whorls encircled with two distant ribs, the last whorl with four ribs, and delicately cancellated with numerous compressed smaller ribs; aperture ovate; canal short.

REEVE, Pro. Zool. Soc., 1843.

Hab. Baclayon, Island of Bohol, Philippines (found under stones on the reefs at low water); Cuming.

This beautifully cancellated shell is closely allied to the *P. tricostata* (Plate XV.); the ribs, however, are more in number and less prominent. Each whorl exhibits four transverse ribs on its formation, the two lower being concealed in all but the last whorl by the lodgement of one whorl upon the other. The cancellated spaces formed over the surface of the shell by the longitudinal ribs crossing the transverse ones seem slightly concave, and have a very characteristic appearance.

By the above title I wish to honour and keep in remembrance the name of my liberal friend Richard Brinsley Hinds, Esq., R.N., on account of the services he is at this moment rendering to conchological science by his cautious examination and description of the new shells collected by Capt. Sir Edward Belcher and himself during the late prolific expedition of H.M.S. *Sulphur*.

120

121 a

121 b

122

123 a

123 b

124

125

126

127

Sowerby fecit.

PLEUROTOMA.

PLATE XV.

Species 120. (Mus. Cuming.)

PLEUROTOMA COLLARIS. *Pleur. testâ acuminato-pyramidali, atrâ; anfractibus prope suturam unicarinatis, infrà serie unicâ granularum cinctis, anfractu ultimo infernè granulifero, granulis seriatim digestis; carinâ granulisque luteis; aperturâ brevi, canali brevissimo, lato.*

THE COLLAR-BOUND PLEUROTOMA. Shell acuminately pyramidal, black; whorls encircled with a keel near the suture and a single row of granules below it, lower part of the last whorl covered with rows of smaller granules; keel and granules yellow; aperture short, canal very short and broad.

SOWERBY, Pro. Zool. Soc., 1833.

Hab. Bay of Caraccas, West Columbia (dredged from muddy sand at the depth of eight fathoms); Cuming.

A little jet-black shell ornamented with a yellow keel, and granules of the same colour.

Species 121. (Fig. *a* & *b*, Mus. Cuming.)

PLEUROTOMA TRICARINATA. *Pleur. testâ subovato-turritâ, subventricosâ, albâ, striis elevatis transversis et longitudinalibus exiliter decussatâ; anfractibus tricarinatis, carinis ultimi eminentioribus; sinu profundo, latissimè excavato; canali brevi.*

THE THREE-KEELED PLEUROTOMA. Shell rather ovately turrited, slightly ventricose, white, finely decussated with transverse and longitudinal raised striæ; whorls three-keeled, keels of the last whorl prominently developed; sinus deep, very widely excavated; canal short.

VALENCIENNES MSS., Mus. Jardin des Plantes.

KIENER, Iconographie, p. 64. pl. 23. f. 4.

Hab. Island of Corrigidor, Philippines (dredged from coarse sand at the depth of six fathoms); Cuming.

This delicate little shell is remarkable on account of the strong and very prominent development of the keels upon the last whorl, and the pricked-like holes which are formed by the crossing of the elevated striæ. The slit or sinus forms a very curious, deep, rounded incision.

Species 122. (Mus. Cuming.)

PLEUROTOMA RETICULATA. *Pleur. testâ fusiformi-turritâ, fuscescente, maculis irregularibus fasciisve obscurioribus purpureis variegatâ; anfractibus rotundatis, costis longitudinalibus lineisque transversis elevatis distantibus clathratis, papillis in angulis sectionum acutis; sinu lato; canali brevi, recto.*

THE RETICULATED PLEUROTOMA. Shell fusiformly turrited, brown, variegated with irregular purple spots or obscure bands; whorls rounded, latticed with longitudinal ribs and transverse elevated lines, forming sharp papillæ at the angles; sinus broad; canal short and straight.

BRONN, Erg. nat. Reise, p. 555.

Murex reticulatus, Renieri.

Variety β.

Testa pallidior, canali breviore, costis fortioribus.

Shell paler, with the canal shorter, and the ribs stronger.

Pleurotoma Cordieri, Payrandeau.

Variety γ.

Testa pallida, anfractibus supernè subangulatis, papillis spinosis.

Shell pale, with the whorls rather angular round the upper part, and the papillæ spinous.

Hab. Mediterranean.

The spinous variety (var. γ.) has been recently dredged off the coast of Nice by Professor E. Forbes, at the depth of from five to forty fathoms.

Species 123. (Fig. *a* & *b*, Mus. Cuming.)

PLEUROTOMA LACTEA. *Pleur. testâ ovato-oblongâ, tenui, subinflatâ, lacteâ, costis carinisve rotundatis striisque exilibus cinctâ; labro simplici, acuto; sinu parvo; aperturâ ovatâ, canali brevissimo.*

THE CREAM-COLOURED PLEUROTOMA. Shell ovately oblong, thin, rather inflated, cream-coloured, encircled with delicate rounded keel-like ribs and striæ; lip simple and acute; sinus small; aperture ovate, canal very short.

REEVE, Pro. Zool. Soc., 1843.

Hab. Bolinao, Island of Luzon, and Gindulman, Island of Bohol, Philippines (found under stones at low water); Cuming.

The lip of this delicate shell does not become in the slightest degree thickened.

Species 124. (Mus. Deshayes.)

PLEUROTOMA HARPULARIA. *Pleur. testâ elongato-turritâ, castaneâ; anfractibus supernè unicarinatis, infrà longitudinaliter costatâ, costis regularibus, obliquis, interstitiis subtilissimè striatis; canali brevi.*

THE LITTLE HARP PLEUROTOMA. Shell elongately turrited, chestnut colour; whorls encircled with a single keel round the upper part, longitudinally ribbed beneath, ribs oblique and ranged with great regularity, interstices between the ribs very finely striated; canal short.

DES MOULINS, Révis. Pleur. p. 56 (note).

Pleurotoma harpula, Valenciennes.

Hab. Coast of New Holland; Kiener.

As the specific title of *harpula* should be appropriated to the *Murex harpula* of Brocchi, a fossil species of *Pleurotoma*, I have thought it proper to adopt the word *harpularia*, proposed by M. Des Moulins in his valuable memoir entitled 'Révision de quelques espèces de Pleurotomes,' in the Transactions of the Linnæan Society of Bordeaux.

I have to thank M. Deshayes for the loan of this interesting shell, brought in the ship "Astrolabe" from New Holland.

Species 125. (Mus. Gray.)

PLEUROTOMA FUSCESCENS. *Pleur. testâ obeso-turritâ, solidâ, fuscescente, anfractibus convexis, supernè unicarinatis, carinâ interdum granulosâ, interdum quasi diffissâ, infrà longitudinaliter costellatis, costellis rectis, anfractûs ultimi granulosis; aperturâ brevi, canali brevissimo; labro incrassato, limbo acuto, sinu lato.*

THE BROWN PLEUROTOMA. Shell stoutly turrited, solid, brown; whorls convex, encircled round the upper part with a single keel, which is sometimes granulous, sometimes split as it were into two keels, lower portion of the whorls longitudinally ribbed, ribs straight, granulated on the last whorl; aperture short, canal very short; lip thickened, edge sharp, sinus broad.

GRAY, MSS. (private cabinet).

Hab. ——?

Care must be taken not to confound this species with the preceding. The *P. fuscescens* is a short stout rude ly formed shell, very much contracted at the aperture, whilst the *P. harpularia* is of an elegant symmetrical growth, with the ribs ranging obliquely and never granulous; and of several specimens of both species before me, none exhibit the least intermediate modification of these peculiarities.

Species 126. (Mus. Cuming.)

PLEUROTOMA BREVICAUDATA. *Pleur. testâ abbreviato-fusiformi, solidâ, luteolâ, apice basique fuscescentibus; anfractibus convexis, supernè unicarinatis, infrà bicarinatis, anfractu ultimo multicarinato; labro simplici, acuto; sinu amplo; aperturâ parvâ, brevi, canali breviusculo.*

THE SHORT-TAILED PLEUROTOMA. Shell shortly fusiform, solid, yellowish, brown at the base and apex; whorls convex, encircled with a single keel round the upper portion and a double keel round the lower; last whorl encircled with single and double keels alternately down to the base, lip simple and acute, sinus large; aperture small, short, canal rather short.

REEVE, Pro. Zool. Soc., 1843.

Hab. Island of Ticao (found on the reefs); Cuming.

This shell reminds one somewhat of the *P. jubata*, but has no indication of the pretty beaded crest which distinguishes that species.

Species 127. (Mus. Cuming.)

PLEUROTOMA RUGIFERA. *Pleur. testâ oblongo-pyramidali, apice acuto; rubidâ, interdum albâ; anfractibus supernè crenatis, infrà longitudinaliter costellatis, ultimi dorso rugifero; aperturâ brevi, canali brevi; labro incrassato, sinu profundo.*

THE WRINKLED PLEUROTOMA. Shell oblong, pyramidal, apex sharp; reddish, sometimes white; whorls crenated round the upper part, longitudinally ribbed beneath, back of the last whorl wrinkled; aperture short, canal short; lip thickened, sinus deep.

SOWERBY, Pro. Zool. Soc., 1833.

Hab. Gallapagos Islands (found in fine coral sand at the depth of six fathoms); Cuming.

A sharp solid little shell with a remarkably strong sinus.

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Sowerby fecit.

PLEUROTOMA.

PLATE XVI.

Species 128. (Mus. Stainforth.)

PLEUROTOMA TRITICEA. *Pleur. testâ ovatâ, albidâ, fusco sparsim et pallidè tinctâ; anfractibus longitudinaliter costatis, costis obliquis, subdistantibus, transversim exiliter striatis; spirâ breviusculâ; aperturâ ovato-oblongâ, labro incrassato, sinu lato.*

THE GRAIN-OF-CORN PLEUROTOMA. Shell oval, whitish, sparingly and faintly stained with brown; whorls longitudinally ribbed, ribs oblique, very finely striated transversely; spire rather short; aperture ovately oblong, lip thickened, sinus broad.

KIENER, Icon., pl. 27. f. 3.

Hab. Indian Ocean; Kiener,

A delicate little shell, in which one whorl appears to sink, as it were, into the other. It approaches somewhat in form to the *P. Vauquelini*, and belongs to that group formerly distinguished by Dr. Leach, and in the present day by Mr. Gray and Mr. Hinds, under the generic title of *Mangelia*.

Species 129. (Mus. Cuming.)

PLEUROTOMA PHILBERTI. *Pleur. testâ fusiformi-turritâ, rubidâ aut purpureo-nigricante, interdum albi-balteatâ; anfractibus subrotundatis, costis longitudinalibus, lineisque elevatis confertim clathratâ; labro intus exiliter denticulato, canali brevisculo.*

PHILBERT'S PLEUROTOMA. Shell fusiformly turrited, reddish or purple-black, sometimes encircled with a narrow white belt; whorls somewhat rounded, closely latticed with longitudinal ribs and transverse raised lines; lip finely denticulated within, canal rather short.

MICHAUD, Bul. Soc. Linn. de Bordeaux, pl. 3. f. 2 and 3.

KIENER, Icon., pl. 24. f. 4.

Pleurotoma variegata, Philippi.

Hab. Mediterranean.

A much smaller and darker-coloured shell than the *P. purpurea*, but so closely allied in other respects that it might almost be considered as a variety of that species.

Species 130. (Mus. Stainforth.)

PLEUROTOMA NITIDA. *Pleur. testâ ovatâ, subobesâ, lævi, nitidâ; luteolâ, lineis fuscis subdistantibus transversim pictâ; anfractibus leviter convexis, apicem versus eximiè plicatâ; spirâ acuminatâ, supernè rosaceâ; labro simplici, in medio leviter coarctato; canali brevi.*

THE SHINING PLEUROTOMA. Shell ovate, rather stout, smooth, shining; yellowish, painted across with rather distant brown lines; whorls slightly convex, delicately plaited towards the apex; spire acuminated, rose-tinted towards the top; lip simple, slightly contracted in the middle; canal short.

KIENER, Icon., pl. 27. f. 4.

Hab. Mauritius; Kiener.

This species is remarkably distinct from any that I am acquainted with.

Species 131. (Mus. Gray.)

PLEUROTOMA LEUFROYI. *Pleur. testâ subovato-fusiformi, tenui, inflatâ; anfractibus costellis longitudinalibus, lineisque transversis elevatis, confertis, ornatis; luteo-fuscescentibus, maculis parvis rubido-fuscis hic et illic variegatis, fasciam medianam pallidam relinquentibus; labro intus incrassato, lacteo; canali brevisculo.*

LEUFROY'S PLEUROTOMA. Shell rather ovately fusiform, thin, inflated; whorls ornamented with longitudinal ribs crossed transversely by close raised lines; pale yellowish-brown, variegated here and there with reddish-brown spots, leaving a pale central band; lip thickened, white within; canal rather short.

MICHAUD, Bul. Soc. Linn. de Bordeaux, pl. 2. f. 5 and 6.

KIENER, Icon., pl. 24. f. 3.

Pleurotoma inflata, Cristoforis; Philippi.

Hab. Mediterranean.

The central pale band is tipped round the upper part of it with a narrow belt of opake white.

Species 132. (Mus. Cuming.)

PLEUROTOMA CLAVATA. *Pleur. testâ acuminato-pyramidali, solidâ, roseo-albicante; anfractibus lævibus, longitudinaliter costatis, costis subdistantibus, in medio subobsoletè tuberculatis, tuberculis fuscescente-incarnatis; aperturâ brevi, latiusculâ; sinu lato, profundo; canali brevissimo.*

THE CLUB-SHAPED PLEUROTOMA. Shell acuminately pyramidal, solid, white, tinged with very faint warm rose-colour; whorls smooth, longitudinally ribbed, ribs rather distant, somewhat obsoletely tuberculated in the middle, tubercles stained with pale dingy flesh-colour; aperture short, rather wide; sinus broad and deep; canal very short.

SOWERBY, Pro. Zool. Soc., 1833.

Hab. Xipixapi, West Columbia (found in sandy mud at the depth of ten fathoms); Cuming.

The last whorl of this shell, being rather stout and solid in the middle, imparts a club-shape to the shell, which is very characteristic.

Species 133. (Mus. Walton.)

PLEUROTOMA INCISA. *Pleur. testâ elongato-oblongâ, solidâ, acuminatâ, fulvâ; anfractibus leviter convexis, striis solidis, elevatis, longitudinalibus, subobliquis, ornatâ, interstitiis profundè incisis; aperturâ brevissimâ, subrotundatâ, sinu lato, profundo; canali brevissimo.*

THE CARVED PLEUROTOMA. Shell elongately oblong, solid, acuminated, yellowish-brown or buff; whorls slightly convex, ornamented with solid, raised, longitudinal, rather oblique striæ, the interstices being deeply cut; aperture very short, nearly round, with the sinus broad and deep; canal very short.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

This species may be easily recognised by the close-set, deeply cut, longitudinal striæ or fine ridges, which evenly cover the entire surface of the shell.

Species 134. (Mus. Belcher.)

PLEUROTOMA PALLIDA. *Pleur. testâ acuminato-turritâ, albâ; anfractibus subrotundatis, creberrimè costellatis, costellis confertis, interstitiis transversim exiliter sulcatis; aperturâ brevi, sinu lato, profundo; canali brevissimo, subrecurvo.*

THE PALE PLEUROTOMA. Shell acuminately turreted, white; whorls somewhat round, very sharply ribbed, ribs close, interstices very finely grooved across; aperture short, sinus broad and deep; canal very short, a little recurved.

SOWERBY, Pro. Zool. Soc., 1833.

Hab. Puerto Portrero, Central America (found on a sandy muddy bed at the depth of thirteen fathoms); Cuming.

The specimen here represented, collected by Mr. Hinds, is about twice the size of any of those originally brought by Mr. Cuming.

Species 135. (Mus. Stainforth.)

PLEUROTOMA ZEBRA. *Pleur. testâ ovato-oblongâ, rubido-fuscâ; anfractibus supernè unicarinatis, in medio tuberculorum serie duplici cingulatis, tuberculis parvis, albis, compressis, anfractu ultimo infernè granuloso-striato; aperturâ elongato-ovali, labro incrassato, sinu parvo; canali brevissimo.*

THE ZEBRA PLEUROTOMA. Shell ovately oblong, reddish-brown; whorls encircled round the upper part with a single keel, round the middle with a double row of small white compressed tubercles, lower portion of the last whorl granulously striated; aperture elongately oval, lip thickened, sinus small; canal very short.

KIENER, Icon., pl. 23. f. 3.

Buccinum zebra, Lamarck.

Hab. Mauritius; Kiener.

Lamarck was unable to discover the generic character of this shell, on account of his specimens being so entirely worn and broken.

Species 136. (Mus. Stainforth.)

PLEUROTOMA PURPUREA. *Pleur. testâ elongatâ, fusco-purpureâ; anfractibus subrotundatis, costellis longitudinalibus striisque elevatis transversis, confertis, exiliter clathratis; aperturâ ovato-oblongâ, labro intus lacteo, sinu parvo; canali breviusculo.*

THE PURPLE PLEUROTOMA. Shell elongated, brownish-purple; whorls somewhat rounded, finely latticed with close-set longitudinal ribs and transverse raised striæ; aperture ovately oblong, lip white within, sinus small; canal rather short.

DE BLAINVILLE, Faune Franç., pl. 4. f. 10.

KIENER, Icon., pl. 25. f. 3.

Murex purpureus, Montague.

Pleurotoma corbis, Michaud.

Hab. Mediterranean.

Kiener observes that this well-known shell is the *Mangelia purpurea* of Risso; it does not however belong to that section of the genus so distinguished by Dr. Leach.

Species 137. (Mus. Gray.)

PLEUROTOMA QUOYI. *Pleur. testâ ovato-oblongâ, flavescente; anfractibus in medio nodulorum serie duplici cingulatis (nodulis parvis, compressis), suprà concavo-depressis, funiculo subnoduloso prope suturam superatis (funiculo maculis rubidis quadratis regulariter picto); infrà liratis, lirarum interstitiis eximiè striatis; aperturâ oblongo-ovatâ, intus fuscescente; canali brevissimo.*

QUOY'S PLEUROTOMA. Shell ovately oblong, yellowish; whorls encircled round the middle with a double row of small compressed nodules, concavely depressed above, surmounted with a slightly nodulous cord, regularly painted with square equidistant reddish-brown spots; lower part of the whorls transversely ridged, interstices between the ridges finely striated; aperture oblong-ovate, interior pale brown; canal very short.

DES MOULINS, Rev. de Pleur., p. 61.

Pleurotoma monile, Valenciennes; Kiener.

Hab. New Holland.

I adopt the name proposed for this shell by M. Des Moulins, in consequence of its former title having been already used by Brocchi in reference to a fossil species. There are several specimens of it in the British Museum.

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Sowerby, del. et lith.

prel. lith. Linn. imp.

PLEUROTOMA.

PLATE XVII.

Species 138. (Mus. Cuming.)

PLEUROTOMA DIGITALE. *Pleur. testâ obeso-oblongâ, nigerrimo-fuscescente, apicem versus incoloratâ; anfractibus convexis, tuberculis albidis minutis seriatim clathratis; aperturâ breviusculâ, sinu lato.*

THE THIMBLE PLEUROTOMA. Shell stoutly oblong, blackish brown, discoloured towards the apex; whorls convex, finely latticed with a number of minute whitish pimples arranged in rows; aperture rather short, sinus broad.

REEVE, Pro. Zool. Soc., 1843.

Hab. Island of Bureas, Philippines (found under stones at low water); Cuming.

The sculpture of this shell reminds one of the pimpled surface of a thimble.

Species 139. (Mus. Powis.)

PLEUROTOMA HASTULA. *Pleur. testâ elongato-fusiformi, solidiusculâ, albidâ, fuscescente sparsim maculatâ; anfractibus liris subtilissimis numerosis cinctis, lirâ centrali lirisque superis majoribus, prominentibus; canali gracili, fissurâ profundâ.*

THE LITTLE JAVELIN PLEUROTOMA. Shell elongately fusiform, rather solid, whitish, sparingly spotted with light brown; whorls encircled with a number of very fine ridges, the centre and two upper of which are large and prominent; canal slender, slit deep.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

This species is chiefly characterized by the stout double ridge that encircles each whorl near the suture, and by the central ridge that is formed in place of the slit as the shell advances in growth.

Species 140. (Mus. Powis.)

PLEUROTOMA CUPREA. *Pleur. testâ acuminato-turritâ, anfractibus supernè depressis, fuscescentibus, liris nodulosis, subflexuosis, distantibus, longitudinalibus, ornatis; aperturâ brevi, sinu lato.*

THE COPPER PLEUROTOMA. Shell acuminately turrited, whorls depressed near the suture, light brown, ornamented with rather flexuous, distant, nodulous longitudinal ridges; aperture short, sinus broad.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

The little dark brown flexuous ridges, passing down the whorls of a much lighter brown, have a neat and conspicuous appearance.

Species 141. (Fig. *a* & *b*, Mus. Cuming.)

PLEUROTOMA VARICOSA. *Pleur. testâ acuminato-turritâ, anfractibus supernè lævibus, infrà longitudinaliter costatis, costis subirregularibus, griseis, interstitiis griseo-cæruleis, transversim striatis, varicibus rudibus lutescentibus grandibus sparsis peculiariter notatis; canali brevissimo, leviter recurvo; sinu lato, subprofundo.*

THE VARICOSE PLEUROTOMA. Shell acuminately turrited, whorls smooth near the suture, longitudinally ribbed beneath, ribs rather irregular, greyish, interstices greyish blue, transversely striated, peculiarly marked with large rude scattered varices; canal very short, slightly recurved; sinus broad and rather deep.

REEVE, Pro. Zool. Soc., 1843.

Hab. Calapan, Island of Mindoro, Philippines (found in coarse sand at the depth of fifteen fathoms); Cuming.

Variety β.

Testa omninò fusca.

Shell entirely brown.

Hab. Island of Corrigidor, Philippines (found in coarse sand at the depth of six fathoms); Cuming.

This species may be easily recognised by its prominent display of varices.

Species 142. (Mus. Taylor.)

PLEUROTOMA INDICA. *Pleur. testâ elongato-turritâ, fusiformi, griseo-albidâ, flammis fuscescentibus pallidissimis ornatâ; anfractibus transversim striatis, supernè concavis, lirâ duplici in medio cinctis, liris minoribus numerosis infrà; aperturâ angustâ, fissurâ profundâ; canali elongato.*

THE INDIAN PLEUROTOMA. Shell elongately turrited,

fusiform, greyish white, ornamented with very pale brownish flames; whorls transversely striated, concave round the upper part, encircled round the middle with a double ridge, and with several smaller ridges beneath; aperture narrow, fissure deep; canal elongated.

Deshayes, Mag. de Zool.

Bellanger, Voy. Ind. Orien., pl. 10. f. 9 and 10.

Hab. Seas of India; Bellanger.

Since resorting to M. Kiener's figure of this species in despair of being able to identify it, I have had the good fortune to receive a specimen from the valuable collection of my very worthy friend Thomas Lombe Taylor, Esq., of Norfolk.

Species 143. (Mus. Royal, Paris.)

Pleurotoma Novæ Zelandiæ. *Pleur. testâ acuminato-turritâ, subfusiformi, albido-roseâ; anfractibus transversim sulcatis, longitudinaliter striatis, prope suturas depressis, leviter crenulatis; labro simplici, fissurâ latiusculâ; aperturâ angustâ, fauce purpureo-rosaceâ.*

The New Zealand Pleurotoma. Shell acuminately turrited, somewhat fusiform, pale rose; whorls transversely grooved, longitudinally striated, depressed near the sutures, slightly crenulated; lip simple, slit rather broad; aperture narrow, purple-rose within.

Pleurotoma rosea, Quoy, Voy. de l'Astrolabe, pl. 35. f. 10 and 11.

Hab. New Zealand; Quoy.

Mr. Sowerby appears to have been the first to make use of the specific title of *rosea* (vide Plate VI. Species 43.).

Species 144. (Mus. Delessert.)

Pleurotoma striata. *Pleur. testâ obeso-oblongâ, acuminatâ, pallidè olivaceo-flavâ; anfractibus longitudinaliter costatis, costis subobliquis, prominentibus; transversim striatis, striis exilibus, numerosis; columellâ supernè callosâ; labro simplici, sinu lato.*

The striated Pleurotoma. Shell stoutly oblong, acuminated, pale olive-yellow; whorls longitudinally ribbed, ribs rather oblique and prominent; transversely striated, striæ very fine and numerous; columella thickened at the upper part; lip simple, sinus broad.

Kiener, Iconographie, p. 36. pl. 14. f. 2.

This appears to be a very distinct species; it may be chiefly recognised by the determined character of the ribs.

Species 145. (Mus. Stainforth.)

Pleurotoma carbonaria. *Pleur. testâ turritâ, carbonariâ; anfractibus prope suturas depressis, lævibus, infrà costatis, costis angustis, distantibus, nodulosis; columellâ callositate supernè munitâ; canali brevi; sinu latissimo, profundo.*

The coal-black Pleurotoma. Shell turrited, coal-black; whorls depressed near the sutures, smooth, ribbed beneath, ribs narrow, distant, nodulous; columella furnished with a callosity at the upper part; canal short, sinus very broad and deep.

Reeve, Pro. Zool. Soc., 1843.

Hab. ——?

All the specimens I have seen of this dark Melania-like species have the apex either decorticated or broken away, an indication of their living in brackish water.

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PLEUROTOMA.

PLATE XVIII.

Species 146. (Mus. Belcher.)

PLEUROTOMA BELLA. *Pleur. testâ fusiformi, basi attenuatâ, gracili, pallidè cæruleo-fuscâ; anfractibus rotundatis, longitudinaliter costulatis, lineis albidis elevatis decussatis, supernè fusco fasciatis; costulis gracilibus, granulis parvis sparsis instructis, suturam simplicem incurrentibus; labro incrassato, sinu parvo, latiusculo; canali brevi, attenuato-recurvo.*

THE PRETTY PLEUROTOMA. Shell fusiform, attenuated at the base, slender, pale bluish brown; whorls rounded, longitudinally ribbed, crossed with white raised lines, banded with darker brown round the upper part; ribs slender, furnished with small scattered granules, running into a simple suture; lip thickened, sinus small, rather wide; canal short, attenuately recurved.

Clavatula bella, Hinds, Pro. Zool. Soc., 1843.

Hab. West Coast of Veragua, and Gulf of Papagayo, Central America (found in mud at the depth of from eight to thirty fathoms); Hinds.

A very interesting species, highly deserving the name assigned to it.

Species 147. (Mus. Belcher.)

PLEUROTOMA PYRAMIS. *Pleur. testâ elongato-pyramidali, anticè subclavatâ; albâ, angulatè costatâ, hexagonâ, transversim creberrimè striatâ, costis confluentibus, acutis; labro incrassato, sinu lato, subsuperficiali; aperturâ parvâ, canali brevissimo.*

THE PYRAMID PLEUROTOMA. Shell elongately pyramidal, somewhat club-shaped anteriorly; white, angularly ribbed, six-sided, transversely very closely striated, ribs sharp, flowing one under the other; lip thickened, sinus broad and rather superficial; aperture small, canal very short.

Clavatula pyramis, Hinds, Pro. Zool. Soc., 1843.

Hab. Straits of Macassar; Hinds.

This shell may be recognized by the hexagonal form that it receives from the subsecutive disposition of the ribs.

Species 148. (Mus. Belcher.)

PLEUROTOMA MERITA. *Pleur. testâ ovatâ, acuminato-turritâ, lævigatâ, luteolâ; anfractibus plicato-costatis, supernè angulatis, lineâ fuscâ spiraliter cinctis, costis anticè evanidis; anfractûs ultimi dorso fusco nebuloso, transversim striato; labro subincrassato; canali brevissimo.*

THE DESERVING PLEUROTOMA. Shell ovate, acuminately turrited, smooth, yellowish; whorls plicately ribbed, angulated next the suture, spirally encircled with a brown line; ribs disappearing anteriorly; back of the last whorl clouded with brown, transversely striated; lip somewhat thickened; canal very short.

Clavatula merita, Hinds, Pro. Zool. Soc., 1843.

Hab. Gulf of Nicoya, Central America (found under stones at low water); Hinds.

The brown hair-line running around the angle of the whorls is a very peculiar feature in this shell.

Species 149. (Mus. Belcher.)

PLEUROTOMA LUCTUOSA. *Pleur. testâ ovatâ, solidâ, acuminatâ, intus extusque nigerrimo-fuscâ; anfractibus lævigatis, supernè planiusculis, tuberculis minutis prope medium uniseriatim cinctis; labro incrassato, sinu lato; canali brevi.*

THE MOURNFUL PLEUROTOMA. Shell ovate, solid, acuminated, dark blackish brown within and without; whorls smooth, rather flat at the upper part, encircled with a single row of minute tubercles near the middle; lip thickened, sinus broad; canal short.

Clavatula luctuosa, Hinds, Pro. Zool. Soc., 1843.

Hab. Bay of Guayaquil, and Gulf of Magdalena, California (found at the depth of from five to twenty-two fathoms); Hinds.

A sombre-looking but very characteristic species.

Species 150. (Mus. Belcher.)

PLEUROTOMA POLITA. *Pleur. testâ fusiformi, albâ, politâ, angulatè costatâ, septanguld, costis confluentibus; labro simplici, acuto, sinu parvo; canali subelongato.*

THE POLISHED PLEUROTOMA. Shell fusiform, white, polished, angularly ribbed, seven-sided, ribs flowing one under the other; lip simple, sinus small; canal rather long.

Clavatula polita, Hinds, Pro. Zool. Soc., 1843.

Hab. Straits of Macassar (found in coarse sand at the depth of seven fathoms); Hinds.

This fusiform species, in which the canal and spire are

of equal length, fully shows that the extensive division of club-shaped Pleurotomæ should not be allowed to rank as a separate genus.

Species 151. (Mus. Belcher.)

PLEUROTOMA PLUMBEA. *Pleur. testâ ovato-fusiformi, pallidè plumbeâ, fuscescente fasciatâ; anfractibus convexis, longitudinaliter costatis, costis numerosis, rotundatis, suturam simplicem incurrentibus; labro tenui, acuto; canali mediocri.*

THE LEAD-COLOUR PLEUROTOMA. Shell ovately fusiform, pale lead-colour, banded with light brown; whorls convex, longitudinally ribbed, ribs numerous and rounded, running into a simple suture; lip thin, sharp; canal middling.

Clavatula plumbea, Hinds, Pro. Zool. Soc., 1843.

Hab. Bay of Magdalena, California, (found at the depth of five fathoms); Hinds.

Though a fragile shell, it is of a dull, heavy cast of colour.

Species 152. (Mus. Belcher.)

PLEUROTOMA STOLIDA. *Pleur. testâ fusiformi, lævigatâ, corneâ, olivaceo-fuscâ; anfractibus supernè depresso-planis; infra tuberculato-costatis, costis albidis, brevibus, obliquis, anticè evanidis; apice papillari; labro simplici, acuto, sinu lato; canali breviusculo.*

THE DULL-LOOKING PLEUROTOMA. Shell fusiform, smooth, horny olive-brown; whorls flatly depressed at the upper part, tuberculously ribbed beneath, ribs whitish, short, oblique, disappearing anteriorly; apex papillary; lip simple, sharp, sinus broad; canal rather short.

HINDS, Pro. Zool. Soc., 1843.

Hab. Lagulhas Bank, Cape of Good Hope (dredged from the depth of forty-three fathoms); Hinds.

Care should be taken not to confound the *Pl. stolida* with the *Pl. semicostata* (Species 67), both of which are from nearly the same locality, and have the same horny appearance.

Species 153. (Mus. Belcher.)

PLEUROTOMA SINENSIS. *Pleur. testâ plus minusve fusiformi, acuminatâ; anfractibus numerosis, convexis, longitudinaliter costatis, lineis elevatiusculis decussatis; costis confertis, subobliquis; suturâ granoso-carinatâ; labro simplici, acuto, sinu lato, profundo; canali nunc elongato, nunc breviusculo recurvo.*

THE CHINESE PLEUROTOMA. Shell more or less fusiform, acuminated; whorls numerous, convex, longitudinally ribbed, and crossed with rather elevated lines; ribs close and rather oblique; suture granulously keeled; lip simple, acute, sinus broad and deep; canal sometimes elongated, sometimes rather short and recurved.

Clavatula Sinensis, Hinds, Pro. Zool. Soc., 1843.

Hab. New Guinea, Straits of Macassar, China Sea (found in mud at the depth of from five to twenty-one fathoms); Hinds.

This species is remarkable for the variable length of the canal: some specimens may be referred to the normal division of the genus with as much propriety as others to the *Clavatula* division.

Species 154. (Mus. Belcher.)

PLEUROTOMA SCULPTA. *Pleur. testâ elongato-turritâ, acuminatâ, tenui, fulvâ, fuscescente fasciatâ; anfractibus planiusculo-convexis, longitudinaliter costatis, lineis elevatiusculis subtilibus decussatis; costis rotundatis, subcompressis, prope suturam desinentibus; labro tenui, acuto; canali breviusculo.*

THE CARVED PLEUROTOMA. Shell elongately turrited, acuminated, thin, yellowish, banded with light brown; whorls rather flatly convex, ribbed longitudinally, crossed transversely with fine raised lines; ribs rounded, rather compressed, leaving off near the suture; lip thin, sharp; canal rather short.

Clavatula sculpta, Hinds, Pro. Zool. Soc., 1843.

Hab. Panama (found in mud at the depth of about seven fathoms); Hinds.

A light neatly carved shell of which Mr. Hinds only met with the single specimen here figured.

Species 155. (Mus. Belcher.)

PLEUROTOMA LÆTA. *Pleur. testâ subclavatâ, albidâ, politâ; anfractibus supernè depresso-planis, infra tuberculis grandibus prominentibus erectis uniseriatim cinctis; anfractu ultimo tuberculorum serie duplici cingulato, tuberculis inferioribus valdè minoribus; labro acuto, sinu profundo; canali brevissimo, subrecurvo.*

THE MERRY PLEUROTOMA. Shell somewhat club-shaped, white, polished; whorls depressly flat at the upper part, encircled beneath with a single row of large prominent erect tubercles; last whorl encircled with a double row of tubercles, the lower of which are much the smaller; lip sharp, sinus deep; canal very short, a little recurved.

Clavatula læta, Hinds, Pro. Zool. Soc., 1843.

Hab. New Guinea and Straits of Macassar (dredged from the depth of from seven to ten fathoms); Hinds.

Chiefly characterized by its sharp erect tubercles.

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LIBRARY OF THE ROYAL ASIATIC SOCIETY BOMBAY BRANCH

Sowerby del. et lith.

prel. lith. Linn. imp.

PLEUROTOMA.

PLATE XIX.

(Eight of the following species were dredged during the surveying voyage of H.M.S. *Beacon*, Capt. Graves, amongst the islands of the Grecian Archipelago, in 1841; the figures of them are considerably magnified.)

Species 156. (Mus. Forbes.)

PLEUROTOMA CRISPATA. *Pleur. testâ fusiformi-turritâ, anfractibus convexis, carinis tribus prominentibus cinctis, interstitiis latiusculis, striis longitudinalibus obliquis eleganter sculptis, carinis anfractûs ultimi subtilioribus, numerosis; albâ, apice fuscescente tincto; canali brevissimo, columellâ perforatâ.*

THE CURLED PLEUROTOMA. Shell fusiformly turreted, whorls convex, encircled with three prominent keels, the interstices between which are broad and elegantly sculptured with oblique longitudinal striæ, keels of the last whorl finer and numerous; white, apex stained with light brown; canal very short, columella perforated.

DE CRISTOFORIS and JAN, Cat. No. 29.

PHILIPPI, Enum. mol. Sicil., p. 200.

Hab. Mediterranean (found at the depth of from forty to a hundred fathoms); Forbes.

A species of great interest, on account of its having been only known hitherto in a fossil state.

Species 157. (Mus. Forbes.)

PLEUROTOMA ABYSSICOLA. *Pleur. testâ brevi, conicâ, nigricante-fuscâ; anfractibus tumidis, longitudinaliter costatis; costis fortibus, striis elevatis subdistantibus decussatis, canali brevissimo.*

THE DEEP-DWELLING PLEUROTOMA. Shell short, conical, blackish brown; whorls swollen, longitudinally ribbed; ribs strong, crossed by rather distant raised striæ, canal very short.

FORBES, Pro. Zool. Soc., 1844.

Hab. Ægean Sea (dredged from the depth of a hundred to a hundred and ten fathoms); Forbes.

A small dark brown shell of very solid structure, inhabiting a deeper zone in the ocean than any species we have yet met with.

Species 158. (Mus. Forbes.)

PLEUROTOMA MINUTA. *Pleur. testâ attenuatâ, rubido-fuscâ, anfractibus longitudinaliter costatis, costis fortibus, striis elevatis subdistantibus decussatis; canali brevi, recto.*

THE MINUTE PLEUROTOMA. Shell attenuated, reddish brown, whorls longitudinally ribbed, ribs strong, crossed with rather distant raised striæ; canal short and straight.

FORBES, Pro. Zool. Soc., 1844.

Hab. Ægean Sea (dredged at the depth of from ninety to a hundred and five fathoms); Forbes.

Species 159. (Mus. Macgillivray.)

PLEUROTOMA DECUSSATA. *Pleur. testâ ovato-fusiformi, lutescente-albâ; anfractibus convexis, striis elevatis transversim et longitudinaliter decussatis, striis longitudinalibus anfractûs ultimi subirregularibus, nunc confertis, nunc distantioribus; labro simplici; aperturâ amplâ; canali brevi; columellâ subtortuosâ.*

THE DECUSSATED PLEUROTOMA. Shell ovately fusiform, yellowish white; whorls convex, crossed transversely and longitudinally with raised striæ, the longitudinal of which, upon the last whorl, are somewhat irregular, sometimes close-set, sometimes more distant; lip simple; aperture large; canal short; columella rather twisted.

MACGILLIVRAY, Moll. Aberdeen, p. 172.

Fusus decussatus, Brown.

Hab. Coast of Aberdeen, North Britain (brought up from deep water by a fishing-line); Macgillivray.

I kindly thank Prof. Macgillivray for the loan of this rare and interesting species.

Species 160. (Mus. Forbes.)

PLEUROTOMA LYCIACA. *Pleur. testâ subabbreviato-fusiformi, anfractibus convexis, supernè angustatis, ultimo spiræ sesquilongitudinem æquante, longitudinaliter costatis, transversim striatis, striis elevatis, alternis majusculis; aperturâ lanceolato-ovatâ; canali longiusculo, recto.*

THE LYCIAN PLEUROTOMA. Shell rather shortly fusiform, whorls convex, narrowed at the upper part, last whorl as long, and half as long again, as the

spire, longitudinally ribbed, transversely striated, striæ elevated, alternate ones rather the larger; aperture lanceolately ovate; canal rather long, straight.

FORBES, Pro. Zool. Soc., 1844.

Hab. Cape Artimesium, coast of Asia Minor (dredged from the depth of eighty fathoms); Forbes.

The spire of this shell is unusually short.

Species 161. (Mus. Forbes.)

PLEUROTOMA TERES. *Pleur. testâ elongato-fusiformi, spirâ acuminatâ; anfractibus rotundis, teretibus, ad suturam complanatis, spiraliter costatis, costis lævibus, prominentibus, interstitiis striato-cancellatis; canali elongato, gracili.*

THE TAPERING PLEUROTOMA. Shell elongately fusiform, spire acuminated; whorls round, tapering, smooth at the suture, spirally ribbed, ribs smooth, prominent, interstices cancellated with striæ; canal long.

FORBES, Pro. Zool. Soc., 1844.

Hab. Gulf of Macri, coast of Lycia, Asia Minor; and island of Paros, Grecian Archipelago (dredged at the depth of about forty-five fathoms); Forbes.

A very elegantly formed shell, remarkable for the tapering regularity of the spiral ribs.

Species 162. (Mus. Macgillivray.)

PLEUROTOMA TURRICULA. *Pleur. testâ oblongo-fusiformi, turritâ, albâ; anfractibus supernè acutangulis, longitudinaliter costatis, costis ad angulum nodulosis, transversim subtilissimè elevato-striatis; aperturâ subquadrato-oblongâ, canali breviusculo; sinu subindistincto.*

THE LITTLE TOWER PLEUROTOMA. Shell oblong-fusiform, turreted, white; whorls sharply angled round the upper part, longitudinally ribbed, ribs nodulous on the angle, transversely very finely striated, striæ raised; aperture rather squarely oblong, canal rather short; sinus somewhat indistinct.

MACGILLIVRAY, Moll. Aberdeen, p. 172.

Murex turriculus, Montague, Test. Brit., pl. 9. f. 1.

Fusus turriculus, Fleming.

Hab. Coast of Aberdeen, North Britain (found on hard ground in deep water); Macgillivray.

The sinus of this shell is so indistinct, that I was for some time doubtful as to the propriety of inserting it in the genus Pleurotoma.

Species 163. (Mus. Forbes.)

PLEUROTOMA TURGIDA. *Pleur. testâ obeso-fusiformi, nigerrimo-fuscâ; anfractibus turgidis, longitudinaliter costatis, costis fortibus, anfractûs ultimi infernè evanidis, transversim subtilissimè striatis; canali brevi.*

THE SWOLLEN PLEUROTOMA. Shell stoutly fusiform, very dark brown; whorls swollen, longitudinally ribbed, ribs strong, those of the last whorl disappearing towards the lower part, transversely very finely striated; canal short.

FORBES, Pro. Zool. Soc., 1844.

Hab. Cape Artimesium, coast of Asia Minor (dredged from the depth of eighty fathoms); Forbes.

This shell may be recognised by the peculiar manner in which the ribs disappear about half-way down the last whorl.

Species 164. (Mus. Forbes.)

PLEUROTOMA ÆGEENSIS. *Pleur. testâ subobeso-fusiformi, fuscâ; anfractibus convexis, longitudinaliter costatis, costis fortibus, alternatis, transversim striatis, striis minutissimis longitudinaliter decussatis; canali brevi.*

THE ÆGEAN PLEUROTOMA. Shell rather stoutly fusiform brown; whorls convex, longitudinally ribbed, ribs strong, alternated, transversely striated, crossed with very minute longitudinal striæ; canal short.

FORBES, Pro. Zool. Soc., 1844.

Hab. Bays of the island of Amorgo, Grecian Archipelago (dredged at the depth of from ten to twenty fathoms); Forbes.

The minute longitudinal striæ cannot well be seen without the assistance of an ordinary lens.

Species 165. (Mus. Forbes.)

PLEUROTOMA FORTIS. *Pleur. testâ acuminato-fusiformi, medianè tumidâ, spirâ peracutâ; anfractibus ventricosis, longitudinaliter costatis, costis fortibus, subdistantibus, transversim striatis, striis elevatis, alternis majusculis; canali brevi.*

THE STRONG PLEUROTOMA. Shell acuminately fusiform, swollen in the middle, spire very sharp-pointed; whorls ventricose, longitudinally ribbed, ribs strong, rather distant, transversely striated, striæ raised, alternate ones rather the larger; canal short.

FORBES, Pro. Zool. Soc., 1844.

Hab. Ægean Sea (dredged at the depth of from seventy to a hundred fathoms); Forbes.

This species may be distinguished by the strong ribs and swollen character of the whorls.

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Sowerby del et sculp.

Reeve Brothers imp.

PLEUROTOMA.

PLATE XX.

Species 166. (Mus. nob.)

PLEUROTOMA ROSACEA. *Pleur. testâ ovato-turritâ, anfractibus rotundatis, supernè depresso-concavis, transversim subtiliter striatis, longitudinaliter crebricostatis; canali brevissimo; sinu lato, subamplo; undique eximiè rosaceâ.*

THE PINK PLEUROTOMA. Shell ovately turreted, whorls rounded, depressly concave round the upper part, transversely finely striated, longitudinally closely ribbed; canal very short; sinus broad, large; delicate rose-colour throughout.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

This shell, of which I have seen another specimen in the collection of Mr. Burt, is of one uniform pink colour.

Species 167. (Mus. nob.)

PLEUROTOMA BÆTICA. *Pleur. testâ turritâ, anfractibus supernè depresso-concavis, transversim elevato-striatis, obliquè costatis, costis plicato-nodulosis; canali brevissimo; sinu lato, amplo; bæticâ.*

THE DARK RROWN PLEUROTOMA. Shell turreted, whorls depressly concave round the upper part, transversely elevately striated, obliquely ribbed, ribs plicately noduled; canal very short; sinus broad, large; dark brown.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

Of a dark shining chesnut-brown colour.

Species 168. (Mus. nob.)

PLEUROTOMA OBLIQUI-COSTATA. *Pleur. testâ ovato-oblongâ, longitudinaliter costatâ, costis angustis, obliquis, subundatis, supernè obtusè mucronatis; canali brevissimo; albidâ, rubido-fusco parcè maculatâ, et variegatâ.*

THE OBLIQUELY-RIBBED PLEUROTOMA. Shell ovately oblong, longitudinally ribbed, ribs narrow, oblique, a little waved, obtusely pointed at the upper part; canal very short; white, spotted and variegated here and there with reddish-brown.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

Although this shell has scarcely attained its full measure of growth it exhibits characters that I have not observed in any other species.

Species 169. (Mus. Gruner.)

PLEUROTOMA FUCATA. *Pleur. testâ ovatâ, crassiusculâ, anfractibus supernè depressiusculis, longitudinaliter costellatis, costellis, subobtusis, striis transversis elevatis subobsoletis cancellatis, anfractu ultimo tuberculo gibboso munito; canali brevissimo; labro supernè subsinuato; albâ, croceo-fuscescente fasciatâ et variegatâ.*

THE STAINED PLEUROTOMA. Shell ovate, rather thick, whorls slightly depressed round the upper part, longitudinally ribbed, ribs small, rather obtuse, cancellated with somewhat obsolete raised striæ, last whorl furnished with a gibbous tubercle; canal very short; lip slightly sinuated at the upper part; white, banded and variegated with yellowish brown.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

The last whorl of this species has a swollen callosity at the back, after the manner of the *Pleurotoma gibbosa* of larger size.

Species 170. (Mus. nob.)

PLEUROTOMA IMPLICATA. *Pleur. testâ pyramidali-turritâ, anfractibus supernè peculiariter depressis, infra seriatim nodosis, nodulorum serie supremâ transversim biliratâ; canali brevissimo; aperturâ brevi; albidâ, epidermide corneâ olivaceâ undique indutâ.*

THE ENVELOPED PLEUROTOMA. Shell pyramidally turreted, whorls peculiarly depressed round the upper part, encircled with rows of nodules beneath, uppermost row of nodules festooned with two close narrow transverse ridges; canal very short; aperture short, whitish, covered throughout with a thick olivaceous horny epidermis.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

A species well distinguished by the marked depression of the whorls, and the festooned pair of ridges between the uppermost nodules.

Species 171. (Mus. nob.)

PLEUROTOMA RUBRIFASCIATA. *Pleur. testâ abbreviato-fusiformi, anfractibus supernè concavis, lævibus, infra transversim striatis, et pulcherrimè crebrinodulosis, nodulis supremis, longitudinaliter confluentibus; canali subelongato; flavescente, rubro cinereoque fasciatâ.*

THE RED-BANDED PLEUROTOMA. Shell abbreviately fusiform, whorls concave and smooth round the upper part, transversely striated beneath and very beautifully closely noduled, uppermost nodules longitudinally confluent; canal rather elongated; yellowish, banded with bright red and ash-colour.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

A very characteristic and pretty species.

Species 172. (Mus. nob.)

PLEUROTOMA SACERDOS. *Pleur. testâ subfusiformi, utrinque attenuatâ, crassâ; anfractibus supernè valdè depresso-concavis, subangulatis, tuberculis transversim compressis ad angulum cingulatis, infra seriatim nodulosis; canali breviusculo; carneo-albidâ, flammis maculisque purpureo-rufis variegatâ, anfractuum parte superiori cinereo tinctâ.*

THE PRIEST PLEUROTOMA. Shell somewhat fusiform, attenuated at both ends, thick; whorls very depressly concave at the upper part, subangulated, encircled with transversely compressed tubercles at the angle, with rows of nodules beneath; canal rather short; fleshy white, variegated with purple red flames and spots, upper part of the last whorl tinged with ash-colour.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

The form of this species is very similar to that of the *Pleurotoma virginea*.

Fig. 173.—A species of *Melania* from the collection of Mr. Gruner, of Bremen, figured inadvertently for a *Pleurotoma*.

Species 174. (Mus. Deshayes.)

PLEUROTOMA CROCATA. *Pleur. testâ pyramidali-oblongâ, transversim elevato-striatâ, longitudinaliter costatâ, anfractu ultimo tuberculo parvo gibboso munito; canali brevissimo; aperturâ brevi, sinu lato, amplo; albidâ, epidermide croceo-olivaceâ indutâ.*

THE SAFFRON PLEUROTOMA. Shell pyramidally oblong, transversely elevately striated, longitudinally ribbed, last whorl furnished with a small gibbous tubercle; canal very short, aperture short, sinus broad, large; whitish, covered with a saffron-olive epidermis.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

I must express my thanks to M. Deshayes for sending me this shell, which is quite unlike any other species.

Species 175. (Mus. nob.)

PLEUROTOMA OBELISCUS. *Pleur. testâ pyramidali-ovatâ, anfractibus supernè concavis, infra nodosis, anfractûs ultimi parte inferiori granoso-liratâ; canali brevi; sinu amplo; albidâ epidermide flavescente-olivaceâ undique indutâ.*

THE OBELISK PLEUROTOMA. Shell pyramidally ovate, whorls concave round the upper part, nodose beneath, lower portion of the last whorl granosely ridged; canal short; sinus large; whitish covered with a yellowish olive epidermis.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

Although the sculpture of this shell somewhat resembles that of the *Pleurotoma fucata* just described, the species are perfectly distinct.

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PLEUROTOMA.

PLATE XXI.

Species 176. (Mus. Cuming.)

PLEUROTOMA ARMILLATA. *Pleur. testâ pyramidali-ovatâ, subfusiformi, anfractibus spiraliter carinatis, carinâ medianâ gemmulatâ, gemmulis transversis; canali brevisculo, sinu amplo, profundo; albidâ, anfractibus supra carinam gemmulatam fuscescentibus.*

THE BRACELET-ENCIRCLED PLEUROTOMA. Shell pyramidally ovate, somewhat fusiform, whorls spirally keeled, middle keel beaded, beads transverse; canal rather short, sinus large, deep; whitish, whorls light brown above the beaded keel.

REEVE, Pro. Zool. Soc., 1845.

Hab. Philippine Islands; Cuming.

Care must be observed not to confound this species with the *Pleurotomæ jubata* or *gemmata*, in which the beads of the middle keel are longitudinal, whilst in this they are compressly transverse.

Species 177. (Mus. nob.)

PLEUROTOMA AQUATILIS. *Pleur. testâ ovato-turritâ, solidâ, spirâ acuminatâ, anfractibus lævibus, supernè depressis, obliquè plicato-tuberculatis; canali brevissimo, sinu amplo; eburneâ, lineis plurimis subtilissimis undulatis, pallidissimè corneo-fuscescentibus, fasciatim pictâ.*

THE RIPPLED PLEUROTOMA. Shell ovately turreted, solid, spire acuminated, whorls smooth, depressed round the upper part, obliquely plicately tubercled; canal very short, sinus large; ivory-white, painted with bands of extremely fine pale horny-brown waved lines.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

The delicate and very characteristic wavy hair-line painting of this shell is scarcely discernible with the naked eye.

Species 178. (Mus. nob.)

PLEUROTOMA FLAVESCENS. *Pleur. testâ ovato-turritâ, anfractibus supernè valdè concavis, infra transversim striatis, nodosis, nodis subirregulariter costellæformè confluentibus; canali brevissimo; flavescente-olivaceâ.*

THE YELLOWISH PLEUROTOMA. Shell ovately turreted, whorls very concave round the upper part, beneath transversely striated, noduled, nodules irregularly flowing down like small ribs; canal very short, yellowish-olive.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

The sculpture of this shell somewhat resembles that of the *Pleurotoma fuscescens*, the sutural keel of that species is however wanting, and the colour is uniformly different.

Species 179. (Mus. Walton.)

PLEUROTOMA FRAGILIS. *Pleur. testâ ovatâ, ventricosâ, tenui, fragili, translucidâ, anfractu ultimo valdè maximo; lineis subtilibus elevatis undique creberrimè reticulatâ quarum transversis fortioribus; aperturâ amplâ, sinuatâ; columellâ basique truncatis; lucido-albâ.*

THE FRAGILE PLEUROTOMA. Shell ovate, ventricose, thin, fragile, transparent, last whorl very much the largest; very closely reticulated throughout with fine raised lines, of which the transverse are the stronger; aperture large, sinuated; base and columella truncated; transparent white.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

I am indebted to the kindness of William Walton, Esq. for the loan of this interesting species, belonging to a small group which Mr. Hinds has generically distinguished by the title of *Daphnella*.

Species 180. (Mus. nob.)

PLEUROTOMA PULCHELLA. *Pleur. testâ ovato-turritâ, anfractibus supernè depressis, medio plicato-tuberculatis, tuberculis angustis, confluentibus, anfractu ultimo tuberculo gibboso munito; canali brevissimo, sinu amplo; vividè rosaceâ, fasciâ lineâque castaneis spiraliter cingulatâ.*

THE PRETTY PLEUROTOMA. Shell ovately turreted, whorls depressed at the upper part, plicately tubercled in the middle, tubercles narrow, flowing downwards, last whorl furnished with a gibbous tubercle; canal rather short; sinus broad; bright pink, spirally encircled with a chesnut-brown band and line.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

A pretty deep pink shell encircled with a bright chesnut band, which is lighter at intervals where it passes over the tubercles.

Species 181. (Mus. nob.)

PLEUROTOMA PUNCTATA. *Pleur. testâ fusiformi, anfractibus supernè valdè depressis, lævigatis, carinâ parvâ prope suturam, medio nodosis, infra granulatis; canali longiusculo; sinu latiusculo; albidâ, rubido-fusco punctatâ, præcipuè super carinam et inter nodos.*

THE DOTTED PLEUROTOMA. Shell fusiform, whorls very much depressed at the upper part, smooth, with a small keel near the suture, nodose in the middle, granulated beneath; canal rather long; sinus rather broad; whitish, dotted with reddish-brown, especially upon the keel and between the nodules.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

This species approaches the typical form of the genus, but is not referable to any of those yet described.

Species 182. (Mus. nob.)

PLEUROTOMA LANCEOLATA. *Pleur. testâ lanceolatâ, anfractibus supernè concavis, tuberculis obliquis plus minusve obsoletis medio ornatis, lævibus, anfractu ultimo minutissimè granulato; canali breviusculo; aurantio-fuscescente, tuberculis albidis.*

THE LANCEOLATE PLEUROTOMA. Shell lanceolate, whorls concave round the upper part, ornamented in the middle with oblique tubercles which are more or less obsolete, smooth, last whorl very minutely granulated; canal rather short; pale orange-brown, the tubercles whitish.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

This is not an adult shell, nor can the sinus be determined on account of a fracture in the lip; the species is nevertheless well distinguished from any hitherto noticed.

Species 183. (Mus. Cuming.)

PLEUROTOMA SACRA. *Pleur. testâ ovatâ, solidiusculâ, basem versus subgibbosâ; anfractibus supernè depressis, nodulorum serie unicâ prope suturam, infra longitudinaliter granoso-costatis, transversim minutè liratis; canali brevissimo, sinu lato; albidâ, anfractu ultimo fasciâ pallidè fuscescente cingulatâ.*

THE SOLEMN PLEUROTOMA. Shell ovate, rather solid, somewhat gibbous towards the base, whorls depressed at the upper part, with a single row of nodules near the suture, longitudinally granosely ribbed beneath, transversely minutely ridged; canal very short, sinus broad; whitish, last whorl encircled with a pale light brown band.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

The whorls of this shell are peculiarly gibbous round the middle.

Species 184. (Mus. nob.)

PLEUROTOMA RUBINICOLOR. *Pleur. testâ ovatâ, subventricosâ, anfractibus supernè angulato-depressis, ad angulum obtuso-nodosis, nodis subplicato-confluentibus, lævibus, ultimo basem versus obsoletè striato; canali brevissimo; aurantio-rufâ, nodis per angulum niveis.*

THE RED-COLOURED PLEUROTOMA. Shell ovate, rather ventricose, whorls angularly depressed at the upper part, obtusely noduled at the angle, nodules somewhat plicately confluent; smooth, last whorl obsoletely striated; canal very short; orange red, nodules along the angle snowy white.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

Well distinguished from any other species by its form and peculiar style of painting.

Species 185. (Mus. Cuming.)

PLEUROTOMA NUX. *Pleur. testâ ovatâ, subpyramidali, anfractibus convexis, supernè leviter concavis, ultimo subgibboso; canali brevissimo, truncato; sinu latiusculo; rubido-castaneâ, columellâ et aperturæ fauce albis.*

THE NUT PLEUROTOMA. Shell ovate, somewhat pyramidal, whorls convex, slightly concave at the upper part, last whorl rather gibbous; canal very short, truncated; sinus rather broad; reddish-chesnut, columella and interior of the aperture white.

REEVE, Pro. Zool. Soc., 1845.

Hab. Cape of Good Hope.

A smooth dark reddish brown shell with no variety of sculpture.

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Sowerby del et sculp.

Reeve Brothers imp.

PLEUROTOMA.

PLATE XXII.

(Figures magnified.)

Species 186. (Mus. Cuming.)

PLEUROTOMA VIOLACEA. *Pleur. testâ pyramidali, acuminatâ, anfractibus multicarinatis, carinis duabus eminentioribus, interstitiis minutissimè et creberrimè striatis; columellâ biplicatâ; canali brevi; sinu lato, inter carinas eminentiores; violaceo-fuscescente.*

THE VIOLET PLEUROTOMA. Shell pyramidal, acuminated, whorls many-keeled, two of the keels more conspicuous than the rest, interstices very minutely and closely striated; columella two-plaited; canal short; sinus broad, between the two more conspicuous keels; violet brown.

HINDS, Mollusca Voy. Sulphur, p. 16. pl. 5. f. 8.

Hab. North coast of New Guinea and Straits of Macassar (in sandy mud from seven to twenty-two fathoms); Hinds. Philippine Islands (in sandy mud from four to seven fathoms); Cuming.

The form of this species is somewhat variable, some examples being more elongated than others.

Species 187. (Mus. Belcher.)

PLEUROTOMA DEBILIS. *Pleur. testâ fusiformi, gracili, acuminatâ, anfractibus transversim striatis, longitudinaliter costellatis, costellis approximatis, suturam incurrentibus; canali mediocri; lutescente.*

THE FAINT PLEUROTOMA. Shell fusiform, slender, acuminated, whorls transversely striated, longitudinally ribbed, ribs small approximated, running into the sutures; canal middling; yellowish.

Clavatula debilis, Hinds, Moll. Voy. Sulphur, p. 17. pl. 5. f. 16.

Hab. New Guinea, Straits of Macassar; Hinds.

A slender species in which the whorls have not that sutural depression round the upper part common to most species of the genus.

Species 188. (Mus. Belcher.)

PLEUROTOMA ERICEA. *Pleur. testâ fusiformi, acuminatâ, anfractibus rotundatis, longitudinaliter costellatis, costellis granosis, lineis elevatis decussatis, suturam incurrentibus; canali brevissimo; pallide fuscescente.*

THE SHARP-POINTED PLEUROTOMA. Shell fusiform, acuminated, ribs rounded, longitudinally ribbed, ribs small, granose, crossed with raised lines, running into the suture; canal very short; pale brown.

Clavatula ericea, Hinds, Moll. Voy. Sulphur, p. 17. pl. 5. f. 15.

Hab. Magnetic Island, Coast of Veragua (dredged from mud at the depth of twenty-six fathoms); Cuming.

The sculpture of this species is of a larger and bolder character than that of the preceding.

Species 189. (Mus. Belcher.)

PLEUROTOMA NITENS. *Pleur. testâ clavatâ, subexcentricâ, anfractibus supernè angulatis, longitudinaliter subobliquè costatis, costis prominentibus, acutis, ad angulum mucronatis, suturam incurrentibus; canali brevi; sinu amplo; fuscâ, nitente.*

THE SHINING PLEUROTOMA. Shell clavate, a little distorted, whorls angulated at the upper part, longitudinally somewhat obliquely ribbed, ribs prominent, sharp, pointed at the angle, running into the suture; canal short; sinus large; brown, shining.

Clavatula nitens, Hinds, Moll. Voy. Sulphur, p. 20. pl. 6. f. 17.

Hab. New Guinea; Straits of Macassar and Malacca (found at a depth varying from seven to twenty-two fathoms); Hinds.

A characteristic and well-defined species.

Species 190. (Mus. nob.)

PLEUROTOMA CLARA. *Pleur. testâ pyramidali, subelongatâ, anfractibus obliquè plicato-nodosis, lævibus; canali brevissimo; sinu amplo; purpureo-fuscâ, anfractuum parte superiori albâ.*

THE CLEAR PLEUROTOMA. Shell pyramidal, rather elongated, whorls obliquely plicately noduled, smooth; canal very short; sinus large; purple-brown, upper part of the whorls white.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

A narrow elongated shell, in which the lower portion of the whorls is of a peculiar dark chocolate brown, whilst the upper part is white.

Species 191. (Mus. Gray.)

PLEUROTOMA CASTANEA. *Pleur. testâ subelongato-turritâ, anfractibus supernè concavis, medio plicato-nodosis; lævigatâ, basi subtiliter sulcatâ; canali brevissimo; castaneo-fuscâ.*

THE CHESNUT PLEUROTOMA. Shell somewhat elongately turreted, whorls concave at the upper part, plicately nodose round the middle; smooth, finely grooved at the base; canal very short; chesnut-brown.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

A light chesnut-brown shell, with a row of oblique plicated nodules encircling the middle of each whorl.

Species 192. (Mus. Cuming.)

PLEUROTOMA VIDUA. *Pleur. testâ subobeso-ovatâ, spirâ acuminatâ, anfractibus supernè depressis, medio plicato-nodosis, nodis crebris, longitudinaliter confluentibus; lævigatâ, basem versus granosâ; canali brevissimo; anfractuum parte superiori niveâ, inferiori olivaceo-nigricante, granis albis.*

THE WIDOWED PLEUROTOMA. Shell rather stoutly ovate, spire acuminated, whorls depressed at the upper part, plicately noduled in the middle, nodules close-set, flowing down; smooth, granuled towards the base; canal very short; upper part of the whorls snowy white, lower part olive-black, granules white.

REEVE, Pro. Zool. Soc., 1845.

Hab. Island of Masbate, Philippines (found at low water); Cuming.

A species of interesting form and easily recognisable by its vivid contrast of colour.

Species 193. (Mus. Cuming.)

PLEUROTOMA PALLIATA. *Pleur. testâ ovato-oblongâ, anfractibus convexiusculis, transversim subtilissimè crebristriatis, granulorum serie unicâ cingulatis, granulis conspicuis, elevatiusculis; canali brevissimo; albidâ, epidermide pallidè fulvâ undique indutâ.*

THE CLOTHED PLEUROTOMA. Shell ovately oblong, whorls rather convex, transversely very finely closely striated, encircled with a single row of conspicuous rather elevated granules; canal very short; whitish, covered with a pale fulvous epidermis.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

Each whorl of this species is encircled with a sharp row of granules, and the shell is clothed with an epidermis of very peculiar character and colour.

Species 194. (Mus. Cuming.)

PLEUROTOMA VARICULOSA. *Pleur. testâ pyramidali, gracili, acuminatâ, anfractibus rotundatis, supernè lævibus, carinâ subtilissimâ juxta suturam cingulatis, longitudinaliter subobliquè granoso-costatis, striis elevatis decussatis; canali breviusculo; sinu amplo, rotundato; purpurascente-fuscâ.*

THE LITTLE-VEINED PLEUROTOMA. Shell pyramidal, slender, acuminated, whorls rounded, smooth at the upper part, encircled with a very fine keel next the suture, longitudinally rather obliquely granosely ribbed, crossed by raised striæ; canal rather short; sinus large, rounded; purplish-brown.

SOWERBY, Pro. Zool. Soc., 1833.

Hab. Bay of Montija, South America (found in sandy mud at the depth of ten fathoms); Cuming.

A slender delicately formed species in which the longitudinal ribs have a close varix-like appearance.

Species 195. (Mus. Belcher.)

PLEUROTOMA CINEREA. *Pleur. testâ ovatâ, acuminatâ, anfractibus supernè depressis, lævibus, transversim striatis, longitudinaliter costatis, costis supernè tuberculatis, anfractûs ultimi infernè bifidis, spiræ suturâ crenatâ; columellâ labroque intus crenulatis; canali breviusculo; sinu amplo; cinereo-fulvâ.*

THE ASHY PLEUROTOMA. Shell ovate, acuminated, whorls depressed at the upper part, smooth, transversely striated, longitudinally ribbed, ribs tuberculated at the upper part, those of the last whorl divided into two towards the lower; suture of the spire crenated; lip and columella crenulated within; canal rather short, sinus large; ashy fulvous colour.

Clavatula cinerea, Hinds, Moll. Voy. Sulphur, p. 18. pl. 6. f. 3.

Hab. ——?

Distinguished by the crenated suture of the spire and bifid termination of the ribs as seen on the last whorl.

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Sowerby del et sculp.

Reeve Brothers imp.

PLEUROTOMA.

PLATE XXIII.

(Figures magnified.)

Species 196. (Mus. Belcher.)

PLEUROTOMA PARDALIS. *Pleur. testâ ovatâ, subobtusâ, longitudinaliter costellatâ, costellis undatis, interstitiis striatis; aperturâ oblongâ; labro intus acunilato; canali brevi; fusco-nigricante, costellis conspicuè fulvis.*

THE PANTHER PLEUROTOMA. Shell ovate, rather obtuse, longitudinally ribbed, ribs small, waved, interstices striated; aperture oblong, lip crenulated within; canal short; blackish brown, ribs conspicuously fulvous-yellow.

Clavatula pardalis, Hinds, Moll. Voy. Sulphur, p. 22. pl. 7. f. 1.

Hab. Gulf of Nicoya (found under stones at low water); Hinds.

The waved fulvous ribs upon a very dark brown ground give a characteristic striped appearance to the shell.

Species 197. (Mus. Belcher.)

PLEUROTOMA OCCATA. *Pleur. testâ attenuato-ovatâ, subfusiformi; anfractibus longitudinaliter angulatè costatis, costis grandibus, transversim exaratis; aperturâ angustâ; canali brevi, corneâ, flavicante.*

THE HARROWED PLEUROTOMA. Shell attenuately ovate, somewhat fusiform; whorls longitudinally angularly ribbed, ribs large, transversely furrowed; aperture narrow; canal short; horny, yellowish.

Clavatula occata, Hinds, Pro. Zool. Soc., 1845.

Hab. Magnetic Island, West Coast of Veragua; Hinds.

A solid shell, distinguished by its broad furrowed ribs and attenuated form.

Species 198. (Mus. Cuming.)

PLEUROTOMA NEBULA. *Pleur. testâ oblongo-turritâ, anfractibus supernè paululum depressis, longitudinaliter costatis, costis lævibus, obtusis, interstitiis transversim striatis; aperturâ parvâ; sinu lato; canali brevissimo, truncato; corneo-fuscescente, subpellucidâ.*

THE FOG PLEUROTOMA. Shell oblong turreted, whorls a little depressed at the upper part, longitudinally ribbed, ribs smooth, obtuse, interstices transversely striated; aperture small; sinus broad; canal very short, truncated; dull horny brown, somewhat transparent.

Murex nebula, Montagne, Test. Brit., pl. 16. f. 6.

Hab. Britain.

A dull horny looking shell, and a decided *Pleurotoma*.

Species 199. (Mus. Belcher.)

PLEUROTOMA PUDICA. *Pleur. testâ fusiformi, acuminatâ, anfractibus supernè depressis, lævibus, infra, costatis, costis obliquis, acutis, anfractüs ultimi dorso obsoletis; aperturâ ovatâ, canali longiusculo; sinu amplo, profundo; fuscescente, nitidissimâ, anfractüs ultimi dorso maculâ amplâ rubido-castaneâ picto.*

THE CHASTE PLEUROTOMA. Shell fusiform, acuminated, whorls depressed at the upper part, smooth, ribbed beneath, ribs oblique, sharp, obsolete on the back of the last whorl; aperture ovate; canal rather long; sinus broad, deep; pale brown, very shining, back of the last whorl painted with a large reddish-chesnut spot.

Clavatula pudica, Hinds, Moll. Voy. Sulphur, p. 20. pl. 6. f. 11 and 12.

Hab. Gulf of Papagayo, Central America (dredged from mud at a depth of from eight to fourteen fathoms); Hinds.

A pretty glittering shell, the last whorl of which is smooth and clouded with a large reddish-chesnut spot.

Species 200. (Mus. Belcher.)

PLEUROTOMA IMPRESSA. *Pleur. testâ fusiformi, acuminatâ, anfractibus tuberculato-costatis, costis obliquis, interstitiis transversim striatis, anfractüs ultimi dorso lævigato; canali brevi; sinu amplo; albido-carneâ, costis albidis.*

THE IMPRESSED PLEUROTOMA. Shell fusiform, acuminated, whorls tubercularly ribbed, ribs oblique, interstices transversely striated, back of the last whorl smooth, canal short; sinus large; pale flesh-colour, ribs whitish.

Clavatula impressa, Hinds, Moll. Voy. Sulphur, p. 21. pl. 6. f. 23, 24.

Hab. Gulf of Papagayo, Central America (dredged from sandy mud at a depth of from eight to fourteen fathoms); Hinds.

A warm flesh-coloured shell with the outer lip a little expanded.

Species 201. (Mus. Cuming.)

PLEUROTOMA EXARATA. *Pleur. testâ pyramidali, anfractibus transversim granoso-striatis, medio leviter angulatis, ad angulum minutè nodulosis, inter nodulis longitudinaliter exaratis; canali brevissimo, truncato; sinu amplo; pallidè fulvâ, sulcis longitudinalibus fusco-punctatis.*

THE PLOUGHED PLEUROTOMA. Shell pyramidal, whorls transversely granosely striated, slightly angulated in the middle, minutely noduled at the angle, longitudinally grooved between the nodules; canal very short, truncated, sinus large; pale fulvous colour, longitudinal grooves dotted with brown.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

The narrow longitudinal grooves in this species are very characteristic.

Species 202. (Mus. Belcher.)

PLEUROTOMA GRAVIS. *Pleur. testâ fusiformi, anfractibus supernè plano-depressis, angulatis, tuberculis parvis ad angulum seriatim cinctis, canali longiusculo; rubido-fuscâ, corneâ, tuberculis albidis, aperturæ fauce fuscâ.*

THE HEAVY PLEUROTOMA. Shell fusiform, whorls flatly depressed at the upper part, angulated, encircled at the angle with small tubercles, canal rather long; reddish-brown, horny, tubercles white; interior of the aperture brown.

HINDS, Moll. Voy. Sulphur, p. 16. pl. 5. f. 6.

Hab. L'Agulhas Bank, Cape of Good Hope (dredged from the depth of forty-three fathoms); Hinds.

A stout dark horny looking shell.

For Species 203 see Plate XXVIII., the specimen here represented being a dark coloured example of the *Pleurotoma nebula*, Species 198.

Species 204. (Mus. Hinds.)

PLEUROTOMA ROBUSTA. *Pleur. testâ ovato-turritâ, spirâ acuminatâ, anfractibus supernè angulatis, ad angulum costatis, transversim elevato-striatis; labro crenato, sinu amplo; canali brevi; albidâ.*

THE ROBUST PLEUROTOMA. Shell ovately turreted, spire acuminated, whorls angulated at the upper part, ribbed at the angle, transversely elevately striated; lip crenated, sinus large; canal short; whitish.

Clavatula robusta, Hinds, Moll. Voy. Sulphur, p. 17. pl. 5. f. 12.

Hab. Hong-Kong, China (found in sandy mud at a depth of from four to seven fathoms); Hinds.

This species is quite colourless, and it is a curious circumstance that China shells mostly are; *Scalaria pretiosa*, *Isocardia Moltkiana*, *Murex pinnatus*, *Venus thiara*, for example.

Species 205. (Mus. Cuming.)

PLEUROTOMA VITTATA. *Pleur. testâ abbreviato-ovatâ, solidâ, gibbosâ, spirâ subacuminatâ; anfractibus supernè depressis, medio plicato-tuberculatis, infra granulatis; labro incrassato, sinu latiusculo; albidâ, vittâ fasciâve lutescente-fuscâ conspicuâ supra tuberculos ornatâ.*

THE RIBAND-BOUND PLEUROTOMA. Shell abbreviately ovate, whorls depressed at the upper part, plicately tubercled round the middle; granulated beneath; lip thickened, sinus rather broad; whitish, ornamented above the tubercles with a conspicuous yellowish brown riband or band.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

A stout gibbous shell, remarkable, independant of any peculiarity of form, for its contrast of colour.

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PLEUROTOMA.

PLATE XXIV.

(Figures magnified.)

Species 206. (Mus. Belcher.)

PLEUROTOMA DAPHNELLOIDES. *Pleur. testâ ovato-oblongâ, tenui, basem versus attenuatâ, anfractibus rotundis, supernè plano-angulatis, striis transversis et longitudinalibus eleganter cancellatis; columellâ arcuatâ, ad basin striatâ; canali breviusculo; albidâ, fusco marmoratâ.*

THE DAPHNELLA-LIKE PLEUROTOMA. Shell ovately oblong, thin, attenuated towards the base, whorls rounded, flatly angulated round the upper part, elegantly cancellated with transverse and longitudinal striæ; columella arched, striated at the base; canal rather short; whitish, marbled with brown.

Daphnella marmorata, Hinds, Moll. Voy. Sulphur, p. 25. pl. 7. f. 19.

Hab. New Guinea (found in mud at the depth of six fathoms); Cuming.

A light ventricose species peculiarly attenuated towards the base.

Species 207. (Mus. Cuming.)

PLEUROTOMA OLYRA. *Pleur. testâ cylindraceo-ovatâ, tenui, subpellucidâ, spirâ brevi; lævigatâ, aut obsoletè striatâ; aperturâ longiusculâ; canali brevissimo, truncato; niveâ, apice roseo.*

THE GRAIN PLEUROTOMA. Shell cylindrically ovate, thin, somewhat transparent, spire short; smooth or obsoletely striated; aperture rather long; canal very short, truncated; snowy white, apex rose-colour.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

A delicate white semi-transparent shell with a pink apex.

Species 208. (Mus. Belcher.)

PLEUROTOMA FIMBRIATA. *Pleur. testâ ovatâ, anfractibus rotundis, longitudinaliter crebrilaminatis, laminis brevibus, numerosis, dentatis, reflexis; labro crenulato, reflexo, sinu minimo; canali breviusculo; pallidè rubido-fuscâ, albifasciatâ.*

THE FIMBRIATED PLEUROTOMA. Shell ovate, whorls round, longitudinally closely laminated, laminæ short, numerous, dentated, reflected; lip crenulated, reflected, sinus very small; canal rather short; pale reddish brown, banded with white.

Clavatula fimbriata, Hinds, Moll. Voy. Sulphur, p. 22. pl. 7. f. 9.

Hab. North coast of New Guinea (found in mud at the depth of twenty-two fathoms); Cuming.

The sculpture of this species is of very peculiar character, consisting of a numerous succession of dentated reflected laminæ.

Species 209. (Mus. Belcher.)

PLEUROTOMA ORNATA. *Pleur. testâ ovato-oblongâ, tenui, ventricosâ, anfractibus convexis, striis decussantibus cancellatis; aperturâ amplâ, sinu latiusculo; canali brevissimo, truncato; pallidè fulvâ, maculis quadratis rufis, seriatim dispositis ornatâ.*

THE ORNAMENTED PLEUROTOMA. Shell ovately oblong, thin, ventricose, whorls convex, cancellated with decussating striæ; aperture large, sinus rather broad; canal very short, truncated; pale fulvous colour, ornamented with rows of small square red spots.

Daphnella ornata, Hinds, Moll. Voy. Sulphur, p. 25. pl. 7. f. 21.

Hab. New Guinea (found in mud at the depth of six fathoms); Hinds.

The aperture of this species is very large, and distinguishes it as a good typical example of Mr. Hinds' genus *Daphnella*.

Species 210. (Mus. Belcher.)

PLEUROTOMA FLAMMEA. *Pleur. testâ subelongato-clavatâ, anfractibus convexis, transversim striatis; canali brevi, truncato; labro incrassato, intus minutè crenulato, sinu subobsoleto; albidâ, flammis longitudinalibus undulatis ornatâ.*

THE FLAME-MARKED PLEUROTOMA. Shell somewhat elongately club-shaped, whorls convex, transversely striated; canal short, truncated; lip thickened, minutely crenulated within, sinus somewhat obsolete, whitish, ornamented with waved longitudinal flames.

Clavatula flammea, Hinds, Moll. Voy. Sulphur, p. 21. pl. 6. f. 21.

Hab. New Ireland (found among coarse sand at low water); Hinds.

A shell of rather solid structure compared with others of the same group.

Species 211. (Mus. Cuming.)

PLEUROTOMA SUBULA. *Pleur. testâ acuminato-attenuatâ, striis elevatis transversis et longitudinalibus creberrimè reticulatâ, carinâ plano-obtusâ prope suturam; canali breviusculo, sinu distincto; albidâ, maculis parvis pallidè aurantio-fuscis juxta suturam.*

THE LITTLE AWL PLEUROTOMA. Shell acuminately attenuated, very closely reticulated with transverse and longitudinal raised striæ, with a flatly obtuse keel near the suture; canal rather short, sinus distinct; whitish, painted next the suture with pale orange-brown spots.

REEVE, Pro. Zool. Soc., 1845.

Hab. Island of Corrigidor, Philippines (found among coarse sand at the depth of seven fathoms); Cuming.

Of an attenuated subulate form, very closely reticulated.

Species 212. (Mus. Cuming.)

PLEUROTOMA AUREOLA. *Pleur. testâ acuminato-elongatâ, tenui, semipellucidâ, transversim liratâ, liris parvis, obtusis, longitudinaliter subtilissimè crebristriatâ; canali brevi, labro intus crenulato, sinu parvo, distincto; aureolâ.*

THE GOLDEN PLEUROTOMA. Shell acuminately elongated, thin, semitransparent, transversely ridged, ridges small, obtuse, longitudinally very finely closely striated; canal short, lip crenulated within, sinus small, distinct; pale golden colour.

REEVE, Pro. Zool. Soc., 1845.

Hab. Island of Luzon, Philippines; Cuming.

A delicate shell of so bright a hyaline texture that the pillar of the shell may be seen throughout.

Species 213. (Mus. Cuming.)

PLEUROTOMA SATURATA. *Pleur. testâ pyramidali-acuminatâ, infernè subcontractâ, anfractibus striis transversis et longitudinalibus creberrimè granoso-reticulatis; canali breviusculo; labro subtiliter crenulato, sinu distincto; intus extusque fuscâ, fasciis albis longitudinalibus subdistantibus, faciâ unicâ transversâ in anfractu ultimo, ornatâ.*

THE DEEP-COLOURED PLEUROTOMA. Shell pyramidally acuminated, somewhat contracted at the lower part, whorls closely granosely reticulated with raised striæ; canal rather short; lip finely crenulated, sinus distinct; deep bright brown within and without, ornamented with rather distant longitudinal white bands, with a single transverse band on the last whorl.

REEVE, Pro. Zool. Soc., 1845.

Hab. Island of Corrigidor, Philippines (found among coarse sand at the depth of seven fathoms); Cuming.

This interesting and very characteristic species is of a bright deep brown colour marked out into large irregular squares by whitish bands.

Species 214. (Mus. Cuming.)

PLEUROTOMA IGNIFLUA. *Pleur. testâ ovato-oblongâ, transversim creberrimè elevato-striatâ, longitudinaliter costis latiusculis approximatis, apicem versus conspicuis, basin versus obsoletis; canali brevi; labro intus crenulato, sinu superficiario; albidâ, flammis fulvo-aurantiis undato-fluentibus ornatâ.*

THE FIRE-FLOWING PLEUROTOMA. Shell ovately oblong, transversely very closely elevately striated, longitudinally ribbed, ribs rather broad, approximated, conspicuous towards the apex, obsolete towards the base; canal short, crenulated within, sinus superficial; whitish, ornamented with waved-flowing fulvous orange flames.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

A strongly marked species partaking almost as much of the characters of *Triton* as of *Pleurotoma*.

Species 215. (Mus. Cuming.)

PLEUROTOMA PATULA. *Pleur. testâ ovato-oblongâ, infernè ventricosâ, subobliquâ, anfractibus tenuibus, transversim subtilissimè et creberrimè striatis; canali brevissimo, truncato; labro simplici, sinu profundo, aperturâ amplâ; albidâ, flammis fulvo-aurantiis, undatis, longitudinaliter fluentibus ornatâ.*

THE OPEN-MOUTH PLEUROTOMA. Shell ovately oblong, ventricose towards the lower part, rather oblique, whorls thin, transversely very finely and closely striated; canal very short, truncated; lip simple, sinus deep, aperture large; whitish, ornamented with longitudinally flowing waved fulvous orange flames.

REEVE, Pro. Zool. Soc., 1845.

Hab. Bolinao, Island of Luzon, Philippines (found under stones at low water); Cuming.

The species in this plate all present very distinct and characteristic variations of form and sculpture.

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Sowerby del et sculp.

Reeve Brothers imp.

PLEUROTOMA.

PLATE XXV.

(Figures magnified.)

Species 216. (Mus. Belcher.)

PLEUROTOMA RIGIDA. *Pleur. testâ ovatâ, subabbreviatâ, anfractibus supernè angulatis, transversim striatis, longitudinaliter costatis, costis latiusculis, approximatis; canali brevi; columellâ rugosâ; labro incrassato, crenulato, sinu amplo; fulvâ.*

THE RIGID PLEUROTOMA. Shell ovate, somewhat abbreviated, whorls angulated at the upper part, transversely striated, longitudinally ribbed, ribs rather wide, approximated; canal short; columella wrinkled; lip thickened, sinus large; fulvous,

Clavatula rigida, Hinds, Moll. Voy. Sulphur, p. 24. pl. 7. f. 18.

Hab. Panama; Hinds.

An obtusely ovate shell with rather broad approximating ribs.

Species 217. (Mus. Belcher.)

PLEUROTOMA ARGILLACEA. *Pleur. testâ ovatâ, acuminatâ, lævigatâ, anfractibus tuberculato-costatis, costis supernè angulatis, approximatis, in anfractu ultimo infernè evanidis; canali breviusculo, columellâ labroque crenulatis, sinu amplo; fuscâ, corneâ.*

THE CLAY PLEUROTOMA. Shell ovate, acuminated, smooth, whorls tubercularly ribbed, ribs angulated at the upper part, approximating in the last whorl, faint at the lower; canal rather short, columella and lip crenulated, sinus large; brown, horny.

Clavatula argillacea, Hinds, Moll. Voy. Sulphur, p. 18. pl. 6. f. 1.

Hab. Straits of Malacca (from mud at the depth of seventeen fathoms); Hinds.

Encircled with short tubercular approximating ribs.

Species 218. (Mus. Belcher.)

PLEUROTOMA NEGLECTA. *Pleur. testâ subfusiformi, acuminatâ, anfractibus rotundatis aut leviter angulatis, transversim elevato-striatis, longitudinaliter costatis, costis rotundatis, approximatis; canali breviusculo; labro incrassato, sinu amplo; ferrugineo-fuscâ.*

THE NEGLECTED PLEUROTOMA. Shell somewhat fusiform, acuminated, whorls rounded, or slightly angulated, transversely elevately striated, longitudinally ribbed, ribs rounded, approximated; canal rather short; lip thickened, sinus large; rusty-brown.

Clavatula neglecta, Hinds, Moll. Voy. Sulphur, p. 20. pl. 6. f. 14.

Hab. Gulf of Nicoya, Central America (found under stones at low water); Hinds.

An acuminated spire with the whorls short and angularly rounded.

Species 219. (Mus. Cuming.)

PLEUROTOMA PUTILLUS. *Pleur. testâ ovatâ spirâ pyramidali-acuminatâ, anfractibus transversis subtiliter striatis, supernè concavis, infra nodosis, nodis longitudinaliter obliquè confluentibus; canali breviusculo; labro simplici, sinu lato; flavicante-albidâ, lineâ undulatâ fulvo-aurantiâ inter nodos fluente.*

THE DWARF PLEUROTOMA. Shell ovate, spire pyramidally acuminated, whorls transversely finely striated, concave round the upper part, nodose beneath, nodules obliquely flowing down; canal rather short; lip simple, sinus broad; yellowish-white, with a fulvous orange undulating line flowing down between each nodule.

REEVE, Pro. Zool. Soc., 1845.

Hab. Calipan, Island of Mindoro, Philippines (found among coarse sand at the depth of fifteen fathoms); Cuming.

The specimen here figured is a shell of rather immature growth; in older specimens the flowing lines become fainter.

Species 220. (Mus. Cuming.)

PLEUROTOMA RUBIDA. *Pleur. testâ ovatâ, spirâ brevi, interdum acuminatâ, anfractibus supernè lævibus, transversim elevato-striatis, longitudinaliter costatis, costis obtuso-rotundatis, latiusculis, approximatis, labrum versus evanidis; canali brevi; columellâ labroque crenulatis; rosaceo-rubidâ, fasciâ nigricante juxta suturam, fasciâque medianâ in anfractu ultimo ornatâ, fasciis interdum nullis.*

THE RED PLEUROTOMA. Shell ovate, spire short, sometimes acuminated, whorls smooth round the upper part, transversely elevately striated, longitudinally ribbed, ribs obtusely rounded, rather broad, approximated, fading towards the outer lip; canal short, lip and columella crenulated; pinkish-red, ornamented with a black band next the suture, and one round the middle of the last whorl, bands sometimes wanting.

Clavatula rubida, Hinds, Moll. Voy. Sulphur, p. 18. pl. 6. f. 6.

Pleurotoma angulata? Kiener.

Hab. Islands of Ticao and Masbate, Philippines (under stones at low water); Cuming. New Guinea (from mud at the depth of seven fathoms), and New Ireland (from among coarse sand at low water); Hinds.

An extremely variable species, though always preserving its peculiar pinkish-red variety of colouring. Kiener appears to have figured a specimen of it for Donovan's *Murex angulalus* of the English Channel.

Species 221. (Mus. Cuming.)

PLEUROTOMA CANDIDA. *Pleur. obeso-fusiformi, lævigatâ, basin versus striatâ, anfractibus supernè angulatis, longitudinaliter costatis, costis latiusculis, obliquis; canali breviusculo; columellâ labroque intus crenulatis; sinu amplo, supernè calloso; candidâ.*

THE WHITE PLEUROTOMA. Shell obesely fusiform, smooth, striated towards the base, whorls angulated at the upper part, longitudinally ribbed, ribs rather broad, oblique; canal rather short, lip and columella crenulated within; sinus large, thickened round the upper part; white.

Clavatula candida, Hinds, Moll. Voy. Sulphur, p. 20. pl. 6. f. 18.

Hab. Magnetic Island, coast of Veragua; Hinds.

A pale stout solid shell, with the sinus remarkably thickened.

Species 222. (Mus. Cuming.)

PLEUROTOMA SPECTRUM. *Pleur. testâ fusiformi, transversim elevato-striatâ, anfractibus rotundatis, longitudinaliter fortiter obliquè plicato-nodosis, nodis in anfractu ultimo evanidè confluentibus; canali brevi; labro simplici; niveâ, nodis pallidè rufescente-fuscis.*

THE PHANTOM PLEUROTOMA. Shell fusiform, transversely elevately striated, whorls rounded, longitudinally strongly obliquely plicately noduled, nodules upon the last whorl faintly flowing down towards the base; canal short; lip simple; snowy-white, nodules palely tinged with reddish brown.

REEVE, Pro. Zool. Soc., 1845.

Hab. Puerto Galero, Isle of Mindoro, Philippines (found among coral sand at the depth of about nine fathoms); Cuming.

A pale obliquely plicated shell minutely and delicately ridged across.

Species 223. (Mus. Belcher.)

PLEUROTOMA RADULA. *Pleur. testâ pyramidali, acuminatâ, anfractibus lineis granuliferis decussatis, uniseriatim tuberculatis, tuberculis sublunatis; canali brevi, aperturâ parvâ, sinu amplo; corneo-fuscâ.*

THE GRATER PLEUROTOMA. Shell pyramidal, acuminated, whorls decussated with granular lines, encircled with rows of sublunate tubercles; canal short, aperture small, sinus large; horny brown.

HINDS, Moll. Voy. Sulphur, p. 16. pl. 5. f. 9.

Hab. Straits of Malacca (in mud at the depth of seventeen fathoms); Hinds.

A dark brown finely granulated shell encircled with rows of tubercles of which the middle is the most conspicuous.

Species 224. (Mus. Belcher.)

PLEUROTOMA ASPERA. *Pleur. testâ subclavatâ, anfractibus rotundis, longitudinaliter costatis, lineis elevatis decussatis, carinâ subobscurâ prope suturam cingulatis; canali brevi; labro incrassato, crenulato, sinu amplo; nigricante-fuscâ.*

THE ROUGH PLEUROTOMA. Shell somewhat club-shaped, whorls rounded, longitudinally ribbed, decussated with raised lines, and encircled with a somewhat obscure keel near the suture; canal short; lip thickened, crenulated, sinus large; blackish-brown.

Clavatula aspera, Hinds, Moll. Voy. Sulphur, p. 19. pl. 6. f. 7, 8.

Hab. Guayaquil (in mud at the depth of five fathoms); Hinds.

A strongly-marked dark coloured shell.

Species 225. (Mus. Cuming.)

PLEUROTOMA BILINEATA. *Pleur. testâ ovato-oblongâ, subpyramidali, anfractibus medio tumidis, uniseriatim plicato-nodosis, nodis angustis, compressiusculis, anfractûs ultimi dorso callositate munito; canali brevissimo, labro simplici, sinu amplo; incarnato-fuscescente, lineis duabus saturatioribus, quarum superiore multo subtiliore, inter nodos cingulatâ.*

THE TWO-LINED PLEUROTOMA. Shell ovately oblong, somewhat pyramidal, whorls swollen in the middle and plicately noduled, nodules narrow, rather compressed, back of the last whorl furnished with a callosity; canal very short, lip simple, sinus large; pale fleshy brown, encircled between the nodules with two darker brown lines the upper of which is much the finer.

REEVE, Pro. Zool. Soc., 1845.

Hab. Islands of Capul and Mindoro, Philippines (found on the reefs and among coarse sand at the depth of fifteen fathoms); Cuming.

In some examples of this very characteristic species the colour is suddenly darker below the row of oblique plicated nodules, and assumes a band-like appearance.

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Sowerby del et sculp

Reeve Brothers imp.

PLEUROTOMA.

PLATE XXVI.

(Figures magnified.)

Species 226. (Mus. Belcher.)

PLEUROTOMA RUBIGINOSA. *Pleur. testâ oblongâ, anfractibus senis subrotundatis, transversim striatis; suturâ simplici; aperturâ brevi, ovatâ; labro intus lævi; canali brevissimo; corneo-fuscâ*

THE RUSTY PLEUROTOMA. Shell oblong, whorls six in number, somewhat rounded, transversely striated; suture simple; aperture short, ovate; lip smooth within; canal very short; horny, brown.

Clavatula rubiginosa, Hinds, Moll. Voy. Sulphur, p. 22. pl. 7. f. 5.

Hab. Straits of Malacca (from mud at the depth of seventeen fathoms); Hinds.

A brown horny shell with a small aperture and rather large sinus.

Species 227. (Mus Belcher.)

PLEUROTOMA MICANS. *Pleur. testâ ovatâ, elongatâ, corneâ, nitidâ, anfractibus octonis, costulatis, costulis subacutis, albidis, obliquis, supernè prope suturam evanidis; anfractüs ultimi dorso ecostulato; aperturâ parvâ, ovali; labro tenui, acuto, intus lævi; canali brevi.*

THE GLITTERING PLEUROTOMA. Shell ovate, elongated, horny, whorls eight in number, ribbed, ribs small, rather sharp, whitish, oblique, fading towards the suture; back of the last whorl smooth; aperture small, oval; lip thin, acute, smooth within; and short.

Clavatula micans, Hinds, Moll. Voy. Sulphur, p. 23. pl. 7. f. 11.

Hab. Gulf of Papagayo (from mud at the depth of fourteen fathoms); Hinds.

A pale shining shell with oblique ribs.

Species 228. (Mus. Belcher.)

PLEUROTOMA DONATA. *Pleur. testâ ovatâ, subelongatâ, roseâ, anfractibus octonis, costulatis; costulis subacutis, obliquis, albidis, supernè prope suturam evanidis; anfractüs ultimi dorso ecostulato; aperturâ parvâ, ovali; labro tenui, acuto, intus lævi; canali brevi.*

THE BESTOWED PLEUROTOMA. Shell ovate, elongated rose colour, whorls eight in number, ribbed, ribs small, rather sharp, oblique, whitish, fading towards the suture; back of the last whorl smooth; canal short.

Clavatula donata, Hinds, Moll. Voy. Sulphur, p. 22. pl. 7. f. 7.

Hab. North coast of New Guinea (from mud at the depth of twenty-two fathoms); Hinds.

The ground colour of this shell is a ruddy pink whilst the ribs are whitish.

Species 229. (Mus. Metcalfe).

PLEUROTOMA METCALFIANA. *Pleur. testâ ovatâ, crassiusculâ, transversim creberrimè elevato-striatâ, longitudinaliter apicem versus subobsoletè sulcatâ; albâ, maculis rufo-fuscis subquadratis fasciatim pictâ; canali brevi.*

METCALFE'S PLEUROTOMA. Shell ovate, rather thick, transversely very closely elevately striated, longitudinally somewhat obsoletely grooved towards the apex; white, painted with bands of reddish-brown spots; canal short.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

I dedicate this unique and valuable shell to William Metcalfe, Esq., in acknowledgment of the obligation I feel under to that gentleman for his unwearied and successful exertions in search of the minute species of the genus.

Species 230. (Mus. Belcher).

PLEUROTOMA QUISQUALIS. *Pleur. testâ fusiformi, acuminatâ, nitidissimâ; anfractibus octonis, supernè lævigatis, infernè costulatis; costulis brevibus obliquis, acutis, lineis albis sinuosis longitudinalibus instructis; aperturâ ovatâ; canali brevi, effuso, recurvo.*

THE LIKE PLEUROTOMA. Shell fusiform, acuminated, very shining, whorls eight in number, smooth at the upper part, ribbed at the lower, ribs small, short, oblique, sharp; furnished with white sinuous longitudinal lines; aperture ovate; canal short, effused, recurved.

Clavatula quisqualis, Hinds, Moll. Voy. Sulphur, p. 19. pl. 6. f. 5,

Hab. Gulf of Papagayo, Central America (found in mud at the depth of from eight to fourteen fathoms); Hinds.

Bright and colourless, with a broad rounded sinus.

Species 231. (Mus. Belcher.)

PLEUROTOMA SPICATA. *Pleur. testâ fusiformi, anfractibus octonis, costulatis, transversim striatis, costulis subacutis; suturâ granulosâ; canali brevi; albidâ, anfractûs ultimi dorso fusco picto.*

THE SPIKED PLEUROTOMA. Shell fusiform, whorls eight in number, ribbed, transversely striated, ribs small, rather sharp; suture granulous; canal short; whitish, back of the last whorl painted brown.

Clavatula spicata, Hinds, Moll. Voy. Sulphur, p. 17. pl. 5. f. 13.

Hab. Bow Island (among fine coral sand); Hinds.

The name of *spicata* appears to have been suggested by the sharp termination of the ribs.

Species 232. (Mus. Gray.)

PLEUROTOMA GRAYI. *Pleur. testâ ovatâ, subventricosâ, anfractibus supernè angulatis, longitudinaliter obtusocostatis, transversim creberrimè sulcatis; canali brevi; labro incrassato, sinu amplo; castaneo-fuscâ.*

GRAY'S PLEUROTOMA. Shell ovate, a little ventricose, whorls angulated at the upper part, longitudinally obtusely ribbed, transversely very closely grooved; canal short; lip thickened, sinus large; chesnut brown.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

An interesting little species for which I am indebted to Mr. Gray.

Species 233. (Mus Belcher).

PLEUROTOMA SCALARIS. *Pleur. testâ fusiformi, acuminatâ, anfractibus septenis, rotundatis, scalariformibus, transversim striatis; costulis rotundatis, distantibus, suturam incurrentibus; labro crenato; canali brevi.*

THE LADDER PLEUROTOMA. Shell fusiform, acuminated, whorls seven in number, rounded, ladder-like, transversely striated; ribs rounded, distant, running into the sutures; lip arched; canal short,

Clavatula scalaris, Hinds, Moll. Voy. Sulphur, p. 18. pl. 6. f. 2.

Hab. Straits of Macassar (found among coarse sand at the depth of twelve fathoms); Hinds.

The ribs or rather varices of this species are not much unlike those of *Scalaria*, running into the suture in the same peculiar manner.

Species 234. (Mus. Belcher).

PLEUROTOMA RETUSA. *Pleur. testâ obeso-ovatâ, anfractibus septenis, costulatis, transversim striatis; costulis rotundatis, confertis; spirâ conicâ; columellâ contortâ; canali breviusculo; aurantiacâ, apice purpureâ.*

THE BLUNT PLEUROTOMA. Shell stoutly ovate, whorls seven in number, ribbed, transversely striated, ribs rounded, close-set; spire conical, columella twisted; canal rather short; orange, purple at the apex.

Clavatula retusa, Hinds, Moll. Voy. Sulphur, p. 24. pl. 7. f. 16.

Hab. Straits of Macassar (from among sand at the depth of ten fathoms); Hinds.

A short stout shell with the whorls depressly hollowed round the upper part.

Species 235. (Mus. Gray).

PLEUROTOMA NIGRESCENS. *Pleur. testâ subpyramidali, anfractibus supernè unicarinatis, infra creberrimè costatis; aperturâ parvâ, sinu amplo, canali brevissimo; fusco-nigricante.*

THE BLACKISH PLEUROTOMA. Shell somewhat pyramidal, whorls encircled round the upper part with a minute keel, very closely ribbed beneath, aperture small, sinus large; canal very short; brownish black.

GRAY, MSS. (Private cabinet).

Hab. St. Vincents, West Indies; Guilding.

A small solid dark shell, having a sharply acuminated spire with somewhat the sculpture of *P. fuscescens.*

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Sowerby del et sculp.

Reeve Brothers imp.

PLEUROTOMA.

PLATE XXVII.

(Figures magnified.)

Species 236. (Mus. Belcher.)

PLEUROTOMA DENTIFERA. *Pleur. testâ elongatâ, acuminatâ, anfractibus quinis, costulatis, lineis transversis decussatis; costulis numerosis, parvis, angustis, suturam incurrentibus; labro crenulato, infernè dilatato et dentifero, columellâ infernè dente parvo munitâ; canali breviusculo.*

THE DENTIFEROUS PLEUROTOMA. Shell elongated, acuminated; whorls five in number, ribbed, crossed with transverse lines; ribs numerous, small, narrow, running into the suture; lip crenulated, dilated and toothed at the lower part, columella furnished with a tooth at the lower part; canal rather short.

Clavatula dentifera, Hinds, Moll. Voy. Sulphur, p. 23. pl. 7. f. 14.

Hab. North Coast of Guinea; Straits of Malacca (found in mud at a depth of from five to seventeen fathoms); Hinds.

The peculiarity of this shell consists in its being finely toothed at the base of the lip and columella after the manner of a *Ricinula*.

Species 237. (Mus. Belcher.)

PLEUROTOMA FULVA. *Pleur. testâ ovatâ, acuminatâ, fulvâ, anfractibus senis, granulosis, tuberculato-costatis, infernè angulatis; suturâ lineâ granulosâ instructâ; aperturâ parvâ; canali brevi, effuso.*

THE FULVOUS PLEUROTOMA. Shell ovate, acuminated, fulvous, whorls six in number, granulous, tubercularly ribbed, angulated at the upper part; suture furnished with a granulous line; aperture small; canal short, effused.

Clavatula fulva, Hinds, Moll. Voy. Sulphur, p. 23. pl. 7. f. 13.

Hab. Straits of Macassar (from among coarse sand at the depth of ten fathoms); Hinds.

Distinguished by a granulous line round the suture and other peculiarities.

Species 238. (Mus. Belcher.)

PLEUROTOMA METULA. *Pleur. testâ ovatâ, acuminatâ, anfractibus quinis planiusculis, obsoletè costulatis, transversim striatis; pallidè rufo-fasciatâ; suturâ lineâ elevatâ instructâ; aperturâ lineari; labro subinflexo; canali brevissimo.*

THE LITTLE MARK PLEUROTOMA. Shell ovate, acuminated, whorls five in number, flattened, obsoletely ribbed, transversely striated; banded with pale red; suture furnished with a raised line; aperture linear; lip a little inflected; canal very short.

Clavatula metula, Hinds, Moll. Voy. Sulphur, p. 23. pl. 7. f. 12.

Hab. —— ?

Mr. Hinds appears to have possessed no record of the locality of this minute species.

Species 239. (Mus. nob.)

PLEUROTOMA LUTEO-FASCIATA. *Pleur. testâ subovato-oblongâ, anfractibus prope suturam impressis, longitudinaliter fortiter costatis, costis crebris, obtusis; canali brevissimo; albâ, fasciis luteis pulcherrimè ornatâ*

THE YELLOW-BANDED PLEUROTOMA. Shell ovately oblong, whorls impressed near the suture, longitudinally strongly ribbed, ribs close-set, obtuse; canal very short; white, prettily ornamented with yellow bands.

REEVE, Pro. Zool. Soc., 1845.

Hab. —— ?

A neatly painted shell strongly ribbed throughout.

Species 240. (Mus. Belcher.)

PLEUROTOMA GLUMACEA. *Pleur. testâ elongatâ, pallidâ, nitidâ, anfractibus senis costulatis, transversim striatis; costulis brevibus, rotundatis, suturam simplicem incurrentibus; aperturâ oblongâ, fuscâ; canali breviusculo.*

THE HUSK PLEUROTOMA. Shell elongated, pale, shining, whorls six in number, ribbed, transversely striated; ribs short, rounded, running into a simple suture; aperture oblong, brown; canal rather short.

Clavatula glumacea, Hinds, Moll. Voy. Sulphur, p. 24. pl. 7. f. 15.

Hab. North coast of New Guinea (from mud at the depth of twenty-two fathoms); Hinds.

The whorls of this species are somewhat unusually depressed round the upper part.

Species 241. (Mus. Belcher.)

PLEUROTOMA CÆLATA. *Pleur. testâ ovatâ, elongatâ, atro-fuscâ, anfractibus octonis, rotundatis, costulatis; costulis obliquis, acutis; suturâ lineâ elevatâ instructâ; aperturâ ovatâ; canali brevi.*

THE CARVED PLEUROTOMA. Shell ovate, elongated, very dark brown, whorls eight in number, rounded, ribbed; ribs oblique, sharp; suture furnished with a raised line; aperture ovate, jet black; canal short.

Clavatula cælata, Hinds, Moll. Voy. Sulphur, p. 22. pl. 7. f. 6.

Hab. Gulf of Fonseca (found in mud at the depth of twenty fathoms); Hinds,

The carving of this shell is very distinctly and neatly made out.

Species 242. (Mus. Metcalfe.)

PLEUROTOMA PAGODUS. *Pleur. testâ pyramidali, anfractibus supernè depressis, subangulatis, ad angulum costatis, costis brevibus, confertis, lineis elevatis decussatis; cinereo-rufescente, maculis rubidis inter costas, columellâ labroque rubido tinctis; canali brevi.*

THE PAGODA PLEUROTOMA. Shell pyramidal, whorls depressed at the upper part, slightly angled, ribbed at the angle, ribs short, close-set, decussated throughout with raised lines; ashy-red, stained with dark red spots between the ribs, lip and columella stained with dark red; canal short.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

A species of peculiar form and colouring.

Species. 243 (Mus. Belcher.)

PLEUROTOMA ALBICANS. *Pleur. testâ ovatâ, elongatâ, albidâ, nitidâ; anfractibus octonis, costulatis, costulis supernè subnodosis; suturâ nodulosâ; aperturâ parvâ, ovali; labro acuto, intus lævi; canali brevi.*

THE WHITISH PLEUROTOMA. Shell ovate, elongated, whitish, shining; whorls eight in number, ribbed, ribs slightly nodose at the upper part; suture nodulous; aperture small, oval; lip sharp, smooth within; canal short.

Clavatula albicans, Hinds, Moll. Voy. Sulphur, p. 44. pl. 7. f. 8.

Hab. Straits of Malacca (from mud at the depth of seventeen fathoms); Hinds.

This species may be recognised by the coronated appearance of the whorls.

Species 244. (Mus. Belcher.)

PLEUROTOMA TESSELLATA. *Pleur. testâ elongatâ, acuminatâ, anfractibus senis, subplanulatis, granulosis, lineis longitudinalibus et transversis decussatis, maculis subquadratis fuscis pictis; suturâ simplici; aperturâ oblongâ; labro intus crenulato; canali brevi.*

THE TESSELLATED PLEUROTOMA. Shell elongated, acuminated, whorls eight in number, rather flattened, granulous, decussated with transverse and longitudinal lines; painted with brown somewhat square spots; suture simple; aperture oblong; lip crenulated within; canal short.

Clavatula tessellata, Hinds, Moll. Voy. Sulphur, p. 44. pl. 7. f. 17.

Hab. Straits of Macassar (from coarse sand at the depth of ten fathoms); Hinds.

A prettily tessellated shell approaching in form to the *Daphnella* group.

Species 245. (Mus. Metcalfe.)

PLEUROTOMA URNULA. *Pleur. testâ ovatâ, ventricosâ, spirâ breviusculâ, longitudinaliter costatâ, transversim elevato striatâ; castaneo-fuscâ; canali brevi usculo, aperto.*

THE LITTLE PITCHER PLEUROTOMA. Shell ovate, ventricose, spire rather short, longitudinally ribbed, transversely elevately striated; chesnut brown; canal rather short, open.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

A curious little ventricose shell which seems scarcely to have arrived at maturity.

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Sowerby, del et. sculp.

Reeve, Brothers, imp.

PLEUROTOMA.

PLATE XXVIII.

Species 246. (Mus. Gray.)

(Magnified to three times its natural length.)

PLEUROTOMA FORTHIENSIS. *Pleur. testâ pyramidali-oblongâ, anfractibus supernè subangulatis, longitudinaliter obliquè costatis; basi truncatâ; albidâ.*

THE FORTH PLEUROTOMA. Shell pyramidally oblong, whorls slightly angulated at the upper part, longitudinally obliquely ribbed; base truncated; whitish.

REEVE, Pro. Zool. Soc., 1845.

Hab. Frith of Forth; Gray.

A small obliquely ribbed species for which I am indebted to Mr. Gray.

Species 247. (Mus. Cuming.)

(Magnified to twice its natural length.)

PLEUROTOMA FORMICARIA. *Pleur. testâ acuminato-oblongâ, longitudinaliter fortiter costatâ, interstitiis striis subtilissimis decussatis; intus extusque piceo-nigrâ.*

THE ANT-LIKE PLEUROTOMA. Shell acuminately oblong, longitudinally strongly ribbed, interstices crossed with very fine striæ; pitch-black within and without.

SOWERBY, Pro. Zool. Soc., 1833.

Hab. Iquiqui, coast of Peru (under stones); Cuming.

An oblong, strongly-ribbed, pitch-black shell.

Species 248. (Mus. Cuming.)

(Magnified to two and a half times its natural length.)

PLEUROTOMA ATTENUATA. *Pleur. testâ fusiformi-oblongâ, utrinque attenuatâ, lævigatâ, longitudinaliter costatâ, costis subdistantibus; pallidè flavicante, lineis castaneis minutissimis obscurè cingulatâ, anfractûs ultimi parte inferiori pallidè castaneâ.*

THE ATTENUATED PLEUROTOMA. Shell fusiformly oblong, attenuated at each end, smooth, longitudinally ribbed, ribs rather distant; pale yellowish, obscurely encircled with very minute chesnut lines, lower part of the last whorl pale chesnut.

PHILIPPI, Enum. Moll. Sicil. vol. ii. p. 166.

Murex attenuatus, Montagu.

Pleurotoma Villiersii, Michaud.

Pleurotoma gracilis, Scacchi.

Murex aciculatus; Lamarck.

Hab. Mediterranean.

According to Kiener, this is the *Murex aciculatus* of Lamarck.

Species 249. (Mus. Gray.)

(Magnified to two and a half times its natural length.)

PLEUROTOMA DORVILLIÆ. *Pleur. testâ oblongo-turritâ, tenuiculâ, anfractibus supernè subangulatis, infra longitudinaliter plicatis, et transversim subtilissimè elevato-striatis; albidâ, zonâ trilineatâ fuscescente cingulatâ.*

DORVILLE'S PLEUROTOMA. Shell oblong-turreted, rather thin, whorls slightly angulated round the upper part, longitudinally plicated and very finely elevately striated beneath; whitish, encircled with a pale brown three-line zone.

GRAY, MSS. (private cabinet.)

Hab. St. Vincents, West Indies; Guilding.

A very delicately engraved turreted species, encircled with a fine three-line zone.

Species 250. (Mus. Cuming.)

(Magnified to twice its natural length.)

PLEUROTOMA RAVA. *Pleur. testâ subfusiformi-ovatâ, spirâ acuminato-turritâ, anfractibus supernè depressis, infra longitudinaliter costatis et transversim subtiliter liratis, labro incrassato, sinu amplo; fulvâ, costarum interstitiis labrique margine purpureo-rufo tinctis.*

THE TAWNY PLEUROTOMA. Shell somewhat fusiformly ovate, spire acuminately turreted, whorls depressed round the upper part, beneath longitudinally ribbed and transversely finely ridged, lip thickened, sinus large; fulvous, interstices between the ribs and edge of the lip stained with purple-red.

Clavatulu rava, Hinds, Moll. Voy. Sulphur, p. 17. pl. 5. f. 18.

Hab. Island of Mindanao, Philippines; Cuming.

The sinus of this little species is unually wide and deep.

Species 251. (Mus. Gray.)

(Magnified to twice its natural length.)

PLEUROTOMA QUADRIFASCIATA. *Pleur. testâ pyramidali,*

anfractibus supernè et infernè unicarinatis, medio longitudinaliter crebriliratis; carinis albidis, anfractibus medio cæruleo-fuscis, liris albicantibus; aperturâ parvâ; canali brevissimo.

THE FOUR-BANDED PLEUROTOMA. Shell pyramidal, whorls encircled with a single keel above and below, longitudinally closely ridged in the middle; keels whitish, middle of the whorls blueish brown, ridges whitish; aperture small; canal very short.

GRAY, MSS. (private cabinet.)

Hab. ——?

The band-like painting of the middle portion of the whorls with the white ridges running across is very characteristic.

Species 252. (Mus. Metcalfe.)

(Magnified to nearly three times its natural length.)

PLEUROTOMA REFLEXA. *Pleur. testâ ovatâ, Tritoniformi, concentricè costatâ, transversim fortiter liratâ; aperturâ longiusculâ sinuosâ, labro reflexo, intus denticulato.*

THE REFLEXED PLEUROTOMA. Shell ovate, Triton-shaped, concentrically ribbed, transversely strongly ridged; aperture rather long, sinuous, lip reflexed, denticulated within.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

Very much the aspect of some of the small Tritons.

Species 253. (Mus. nost.)

PLEUROTOMA QUADRATA. *Pleur. testâ ovatâ, spirâ turritâ, anfractibus fortiter angulatis, longitudinaliter costatis, costis ad angulum mucronatis, infra striis duabus elevatis cingulatis, anfractûs ultimi parte inferiori lirâ mucronatâ clathratâ; flavicante, costarum interstitiis rufo-castaneis; sinu parvo.*

THE SQUARED PLEUROTOMA. Shell ovate, spire turreted, whorls strongly angulated, longitudinally ribbed, ribs pointed at the angle, encircled beneath with two raised striæ, lower part of the last whorl latticed with a pointed ridge; yellowish; interstices between the ribs reddish chesnut; sinus small.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

A widely latticed shell of very characteristic growth.

Species 254. (Mus. Metcalfe.)

PLEUROTOMA PARVULA. *Pleur. testâ fusiformi-ovatâ, anfractibus tumidiusculis, longitudinaliter costatis, transversim creberrimè liratis; canali breviusculo; lutescente.*

THE SMALL PLEUROTOMA. Shell fusiformly ovate, whorls rather swollen, longitudinally ribbed, transversely very minutely ridged; canal rather short; pale rusty yellow.

REEVE, Pro. Zool. Soc. 1845.

Hab. ——?

This species may be recognised by its delicate and closely-latticed sculpture.

Species 255. (Mus. Gray.)

(Magnified to three times its natural length.)

PLEUROTOMA PENTAGONALIS. *Pleur. testâ oblongo-ovatâ, lævigatâ, longitudinaliter pentagonali, ad angulos compresso-costatâ, costis ad anfractuum parte superiori mucronatis; eburneâ.*

THE PENTGONAL PLEUROTOMA. Shell oblong-ovate, smooth, longitudinally five-angled, compressly ribbed at the angles, pointed at the upper part of the ribs; ivory white.

GRAY, MSS. (private cabinet.)

Hab. St. Vincents, West Indies; Guilding.

A minute species with five ribs on each whorl following one under the other.

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LIBRARY OF THE ROYAL ASIATIC SOCIETY

Sowerby del. et. sculp.

Reeve Brothers, imp.

PLEUROTOMA.

PLATE XXIX.

(All magnified to twice their natural size.)

Species 256. (Mus. Cuming.)

PLEUROTOMA PSEUDO-CARINATA. *Pleur. testâ ovatâ, subpyramidali, anfractibus supernè concavis, subindistinctè carinatis, infrà confertim plicato-costatis, transversim crebrisulcatis; basi truncatâ; flavescente.*

THE FALSE-KEELED PLEUROTOMA. Shell ovate, somewhat pyramidal, whorls concave round the upper part, somewhat indistinctly keeled, closely plicately ribbed beneath, transversely closely grooved; base truncated; yellowish.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

The plicated ribs are rather oblique.

Species 257. (Mus. nost.)

PLEUROTOMA LANGUIDA. *Pleur. testâ gracili-fusiformi, longitudinaliter noduloso-costatâ, transversim elevato-striatâ, costis striisque subdistantibus; sinu amplo; albâ, rufescente-fusco tinctâ.*

THE FEEBLE PLEUROTOMA. Shell slenderly fusiform, longitudinally nodulously ribbed, transversely elevately striated, ribs and striæ rather distant; sinus large; white, stained with reddish-brown.

REEVE, Pro. Zool. Soc., 1845.

An elegantly formed slender shell.

Species 258. (Mus. Metcalfe.)

PLEUROTOMA PUNCTICINCTA. *Pleur. testâ ovatâ, spirâ breviusculâ, longitudinaliter subobscurè plicatâ, interstitiis minutissimè striatis; sinu subamplo; albidâ, cingulâ unicâ punctatâ spiraliter ornatâ.*

THE DOT-ENCIRCLED PLEUROTOMA. Shell ovate, spire rather short, longitudinally rather obscurely plicated, interstices very minutely striated; sinus rather large; whitish, spirally ornamented with a single belt of dots.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

Encircled by a belt formed of a single dot in each longitudinal interstice.

Species 259. (Mus. Gray.)

PLEUROTOMA NASSOIDES. *Pleur. testâ ovato-turritâ, tenui, quasi pellucidâ, anfractibus subrotundatis, confertim obtusè costatis; labro incrassato, intus denticulato, sinu subamplo; corneo-albidâ, anfractibus supra et infra rufo-fusco fasciatis.*

THE NASSA-LIKE PLEUROTOMA. Shell ovately turreted, thin, as though pellucid, whorls somewhat rounded, closely obtusely ribbed; lip thickened, denticulated within, sinus rather large; horny white, whorls banded with reddish-brown above and below.

GRAY, MSS. (private cabinet.)

Hab. —— ?

A semi-transparent horny looking shell, banded next the sutures with reddish brown.

Species 260. (Mus. nost.)

PLEUROTOMA PYRAMIDULA. *Pleur. testâ subpyramidali-elongatâ, liris minutis longitudinalibus et transversis creberrimè clathratâ, suturis unicarinatis; aperturâ parvâ, sinu amplo; basi truncatâ; albidâ,*

THE MINARET PLEUROTOMA. Shell somewhat pyramidally elongated, very closely latticed with minute longitudinal and transverse ridges, sutures one-keeled; aperture small, sinus large; base truncated; whitish.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

Solid, and tapering with peculiar symmetry to the apex.

Species 261. (Mus. nost.)

PLEUROTOMA ÆRUGINOSA. *Pleur. testâ acuminato-turritâ, anfractibus longitudinaliter subobsoletè plicato-costatis, interstitiis minutissimè impresso-striatis; albidâ, suturis livido-viridescentibus, anfractüs ultimi parte inferiori livido-viridescente, punctis nigricantibus marginatâ, apice rufescente-fusco.*

THE CANKERED PLEUROTOMA. Shell acuminately turreted, whorls longitudinally somewhat obsoletely plicately ribbed, interstices very minutely impressly striated; whitish, sutures livid-green, lower portion of the last whorl entirely livid-green edged with a zone of black dots, apex reddish-brown.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

The colouring of this species, it may be observed, is of a character totally distinct from that of any other.

Species 262. (Mus. nost.)

PLEUROTOMA OBLIQUATA. *Pleur. testâ ovatâ, subobesâ, spirâ acuminatâ, anfractibus medio angulato-tumidis, obliquè costatis, costis ad angulum nodosis; intus extusque flavido-fuscâ, zonâ pallidâ angustâ ad angulum cingulatâ.*

THE CROOKED PLEUROTOMA. Shell ovate, rather stout, spire acuminated, whorls angularly swollen in the middle, ribs nodose at the angle; yellowish-brown within and without, encircled with a narrow pale zone at the angle.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

Distinguished not only by its peculiarity of form and colouring, but by the curious oblique twist of the ribs.

Species 263. (Mus. Metcalfe.)

PLEUROTOMA PELLIS-PHOCÆ. *Pleur. testâ pyramidali, anfractibus convexis, longitudinaliter fortiter et creberrimè granulatis, transversim subsulcatis aperturâ peculiariter parvâ, sinu indistincto.*

THE SEAL-SKIN PLEUROTOMA. Shell pyramidal, whorls convex, longitudinally slightly grooved; aperture peculiarly small, sinus indistinct.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

The sinus is very indistinct in this interesting little shell, although it has the outward form of the genus.

Species 264. (Mus. nost.)

PLEUROTOMA VEXILLUM. *Pleur. testâ acuminato-elongatâ, longitudinaliter crebricostatâ, basi transversim liratâ; aperturâ parvâ, sinu amplo, albidâ, suturis et anfractûs ultimi parte inferiori fuscis.*

THE FLAG PLEUROTOMA. Shell acuminately elongated, closely ribbed, transversely ridged at the base; aperture small, sinus large; sutures and lower part of the last whorl dark brown.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

Distinguished by its dark chocolate brown banded style of colouring.

Fig. 265.—A species of *Purpura* or *Buccinum*, inadvertently figured for a *Pleurotoma*.

For Species 265, see Pl. xxxix.

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PLEUROTOMA.

PLATE XXX.

(All magnified to twice their natural length.)

Species 266. (Mus. Cuming.)

PLEUROTOMA CARDINALIS. *Pleur. testâ pyramidali, spirâ acuminatâ, anfractibus longitudinaliter subtiliter plicatis, transversim minutissimè striatis; sinu lato, amplo; albidâ, fasciis violaceo-brunneis cingulatâ.*

THE CARDINAL PLEUROTOMA. Shell pyramidal, spire acuminated, whorls longitudinally finely plicated, transversely very minutely striated; sinus broad, large; whitish, encircled with violet-brown bands.

REEVE, Pro. Zool. Soc., 1845.

Hab. Island of Negros, Philippines (found among sand at the depth of four fathoms); Cuming.

A very delicately formed, spirally banded species, approximating in general character to the *Pleurotoma rava.*

Species 267. (Mus. nost.)

PLEUROTOMA ARATA. *Pleur. testâ pyramidali, suturis peculiariter excavatis, anfractibus lævis angustis granulosis creberrimè cingulatis; aperturâ parvâ; albâ.*

THE PLOUGHED PLEUROTOMA. Shell pyramidal, sutures peculiarly excaved, whorls very closely encircled with narrow granulous ridges; aperture small; white.

Hab. ——?

The ridges are more granulous towards the apex.

Species 268. (Mus. Gray.)

PLEUROTOMA GUILDINGII. *Pleur. testâ pyramidali-oblongâ, anfractibus supernè depresso-concavis, infra obliquè nodoso-plicatis, transversim undique creberrimè striatis; intus extusque piceo-nigrâ.*

GUILDING'S PLEUROTOMA. Shell pyramidally oblong, whorls depressly hollow round the top, obliquely nodosely plicated beneath, transversely very closely striated throughout; pitch-black within and without.

REEVE, Pro. Zool. Soc., 1845.

Hab. St. Vincents, West Indies; Guilding.

I have taken the liberty of naming this species after the Rev. Lansdowne Guilding, in commemoration of the eminent services rendered by that gentleman, by his researches after the minute Pleurotomæ of the Island of St. Vincent.

Species 269. (Mus. Cuming.)

PLEUROTOMA HYALINA. *Pleur. testâ elongato-acuminatâ, basi truncatâ, tenui, hyalinâ, longitudinaliter undique minutissimè et confertissimè elevato-striatâ; albidâ, lineis rufo-fuscis distantibus cingulatâ; labro simplici, sinu parvo.*

THE HYALINE PLEUROTOMA. Shell elongately acuminated, truncated at the base, thin, transparent, longitudinally very minutely and closely elevately striated throughout; whitish, encircled with distant reddish-brown lines; lip simple, sinus small.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

An extremely delicate hyaline shell, minutely striated longitudinally, and encircled transversely with distant fine brown lines.

Species 270. (Mus. Cuming.)

PLEUROTOMA TICAONICA. *Pleur. testâ oblongo-ovatâ, spirâ tereti, anfractibus subventricosis, transversim irregulariter liratis, lirarum interstitiis, minutissimè clathratis; albidâ, aurantio-fusco hic illic flammatâ; sinu parvo.*

THE TICAO PLEUROTOMA. Shell oblong-ovate, spire tapering, whorls rather ventricose, transversely irregularly ridged, interstices between the ridges very minutely latticed; whitish, flamed here and there with orange-brown; sinus small.

REEVE, Pro. Zool. Soc., 1845.

Hab. Island of Ticao, Philippines (found on the reefs); Cuming.

This and the preceding species belong to the *Daphnella* group of Mr. Hinds.

Species 271. (Mus. nost).

PLEUROTOMA FULVA. *Pleur. testâ oblongo-ovatâ, subturritâ, anfractibus longitudinaliter multicostatis, costis angustis, prominentibus; fulvâ.*

THE FULVOUS PLEUROTOMA. Shell oblong-ovate, slightly

turreted, whorls longitudinally many-ribbed, ribs narrow, prominent, fulvous.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

The interstices between the ribs are closely excavated to their base on each side.

Species 272. (Mus. Cuming.)

PLEUROTOMA CANTHARIS. *Pleur. testâ obtuso-ovatâ, crassâ, solidâ, lævigatâ, anfractibus medio oblique nodoso-plicatis; sinu subamplo; nigricante-fuscâ, nodis albidis.*

THE BEETLE PLEUROTOMA. Shell obtusely ovate, thick, solid, smooth, whorls oblique, nodosely plicated round the middle; sinus rather large; very dark brown, nodules whitish.

REEVE, Pro. Zool. Soc., 1845.

Hab. Sibonga, Island of Zebu, Philippines (found under stones at low water); Cuming.

A dull stout, dark, chocolate-brown shell reminding one of a little black-beetle.

Species 273. (Mus. Cuming.)

PLEUROTOMA VULTUOSA. *Pleur. testâ ovatâ, anfractibus subrotundis, longitudinaliter obtusè costatis, transversim creberrimè liratis; labro intus denticulato, sinu amplo, lato; albicante, apice pallidè rosaceo.*

THE FROWNING PLEUROTOMA. Shell ovate, whorls somewhat round, longitudinally obtusely ribbed, transversely very closely ridged; lip denticulated within, sinus large, broad; whitish, apex tinged with pink.

REEVE, Pro. Zool. Soc., 1845.

Hab. Baclayon, Island of Bohol, Philippines (found under stones); Cuming.

Sometimes encircled round the base of the last whorl with a broad brown band.

Species 274 (Mus. Cuming.)

PLEUROTOMA OPALUS. *Pleur. testâ oblongo-ovatâ, pentagonali, crassâ, lævigatâ, longitudinaliter costatâ, costis obliquè continuis, subnodosis, angustis, quasi vellicatis, interstitiis plano-concavis; aperturâ parvâ, sinu amplo, profundo; eburneâ, nitente, costarum interstitiis incarnato-fuscescentibus.*

THE OPAL PLEUROTOMA. Shell oblong-ovate, five-sided, thick, smooth, longitudinally ribbed, ribs obliquely continuous one under the other, slightly nodose, narrow, as if pinched, interstices between the ribs, flatly concave; aperture small, sinus large, deep; ivory white, shining, interstices between the ribs fleshy brown.

REEVE, Pro. Zool. Soc., 1845.

Hab. Cagayan, Province of Misamis, Island of Mindanao, Philippines (found in sandy mud at the depth of twenty-five fathom); Cuming.

An extremely interesting five-angled pagoda-like shell, stout in the middle, and rising pentangularly to a sharp apex.

Species 275. (Mus Cuming.)

PLEUROTOMA EBUR. *Pleur. testâ oblongo-ovatâ, pentagonali, crassâ, spirâ acuminatâ, longitudinaliter continuè costatâ, transversim striatâ, striis basem versus conspicuis; sinu amplo, profundo; eburneâ.*

THE IVORY PLEUROTOMA. Shell oblong-ovate, five sided, thick, spire acuminated, longitudinally ribbed, ribs obliquely continuous one under the other, transversly striated, striæ conspicuous towards the base; sinus large, deep; ivory white.

REEVE, Pro. Zool. Soc., 1845.

Resembling the preceding, but striated, and more opaque.

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Reeve, Brothers, imp.

PLEUROTOMA

PLATE XXXI.

(All magnified to twice their natural length.)

Species 276. (Mus. Cuming.)

PLEUROTOMA ÆGROTA. *Pleur. testâ oblongo-ovatâ, tenuiculâ, subventricosâ, spiræ suturis profundis, striis impressis longitudinalibus et transveris undique decussatâ; aperturâ subelongatâ, amplâ; albicante.*

THE SICKLY PLEUROTOMA. Shell oblong-ovate, rather thin, a little ventricose, sutures of the spire deep, decussated throughout with longitudinal and transverse striæ; aperture rather elongated, large; whitish.

REEVE, Pro. Zool. Soc., 1845.

Hab. Singapore (found among fine sand at the depth of seven fathoms); Cuming.

Intermediate in form between Mr. Hind's genus *Daphnella* and *Pleurotoma* true.

Species 277. Mus. Taylor.)

PLEUROTOMA SCALARIS. *Pleur. testâ ovatâ, tenui, spirâ breviusculâ, concentricè subplicatâ, columellâ leviter plano-excavatâ, labro tenui, simplici; sordidè albâ.*

THE LADDER-STEP PLEUROTOMA. Shell ovate, thin, spire rather short, concentrically subplicated, columella slightly flatly excavated, lip thin, simple; dirty white. *Defrancia scalaris*, Vahl.

Hab. Greenland.

A small concentrically plicated shell, with a dark tinged flattened columella.

Species 278. Mus. Taylor.

PLEUROTOMA LEUCOSTOMA. *Pleur. testa ovatâ, tenui, ventricosâ, spirâ breviusculâ, suturis subimpressis; anfractibus supernè depressis, longitudinaliter creberrimè plicatis, transversim striis reticulatis; columellâ subexcavatâ, labro tenui simplici; sordidè albâ, columellâ et aperturæ fauce eburneis.*

THE WHITE-MOUTH PLEUROTOMA. Shell ovate, thin, ventricose, spire rather short, sutures somewhat impressed; whorls depressed round the upper part, longitudinally very closely plicated, transversely reticulated with striæ; columella slightly excavated, lip thin, simple; dirty white, columella and interior of the aperture ivory white.

Defrancia reticulata, Vahl.

Hab. Greenland.

Differing from the preceding species by its rather more attenuated form, and reticulated style of sculpture.

Fig. 279.

Pleurotoma nitida, Sowerby. Pro. Zool. Soc., 1833.—As this shell proves to be a rather worn specimen of the *Pleurotoma variculosa* of the same author, I take the opportunity of describing a species very like it in form, but merely very closely concentrically ribbed, with simple sutures.

Species 279.

PLEUROTOMA CONCENTRICOSTATA. *Pleur. testâ gracili-fusiformi, spirâ acuminatâ, anfractibus creberrimè concentricè costatis, suturis simplicibus; incarnato-fuscescente.*

THE CONCENTRIC-RIBBED PLEUROTOMA. Shell slenderly fusiform, spire acuminated, whorls very closely concentrically ribbed, sutures simple; flesh-tinged brown.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

Fig. 280.—*Pleurotoma hyalina* (ante pl. xxx. fig. 269), a smaller but adult specimen.

For species 280 see pl. xxxix.

Species 280. (Mus. Cuming.)

PLEUROTOMA LIRATA. *Pleur. testâ subfusiformi, basi contractâ, transversim undique liratâ, columellâ excavatâ, callositate supernè munitâ, labro subeffuso, leviter incrassato, sinu lato amplo, canali paululum elongato; albidâ, labri margine intus rufescente.*

THE RIDGED PLEUROTOMA. Shell somewhat fusiform, contracted at the base, transversely ridged throughout, columella excavated, furnished with a callosity at the upper part, lip somewhat effused, slightly thickened, sinus broad, large; canal a little elongated; whitish, edge of the lip stained with red.

REEVE, Pro. Zool. Soc., 1845.

Hab. Islands of Luzon and Mindanao, Philippines (found in sandy mud at the depth of seven fathoms); Cuming.

The lip of this shell is stained internally along the edge in a very characteristic manner with deep dark red.

Species 282. (Mus. Cuming.)

PLEUROTOMA NEXA. *Pleur. testâ ovatâ, Tritoniformi, anfractibus subrotundatis, plicato-costatis, funiculis exilibus angustis, costas super leviter nodulosis, cingulatis; aperturâ subamplâ, labro planulato, sinu lato; canali brevissimo, recurvo; albâ, fusco undique tinctâ et fasciatâ, funiculis suturatioribus.*

THE TIED PLEUROTOMA. Shell ovate, Triton-shaped, whorls rather rounded, plicately ribbed, encircled with fine narrow cords, slightly nodulous on the ribs; aperture rather large, lip flattened, sinus broad; canal very short, recurved; white, stained and banded with brown, cords darker brown.

REEVE, Pro. Zool. Soc., 1845.

Hab. Islands of Masbate and Luzon, Philippines (found under stones at low water); Cuming.

An interesting brown-stained shell, tied round, as it were, with fine knotted cords of a darker brown.

Species 283. (Mus. Cuming.)

PLEUROTOMA INQUINATA. *Pleur. testâ acuminato-fusiformi, anfractibus transversim exiliter liratis, longitudinaliter creberrimè striatis; sinu profundo; albidâ, aurantio-fusco hic illic inquinatâ.*

THE SMEARED PLEUROTOMA. Shell acuminately fusiform, whorls transversely faintly ridged, longitudinally very closely striated; sinus deep; whitish, smeared here and there with orange-brown.

REEVE, Pro. Zool. Soc., 1845.

Hab. Gindulman, Island of Bohol, Philippines (found among coral sand at the depth of seven fathoms); Cuming.

The longitudinal striæ give a fine reticulated character to the ridge, with which it is delicately encircled throughout.

Species 284. (Mus. nost.)

PLEUROTOMA UNDATICOSTA. *Pleur. testâ fusiformi, anfractibus supernè leviter depressis, costis longitudinalibus undatis concentricè ornatâ; albidâ.*

THE WAVED-RIB PLEUROTOMA. Shell fusiform, whorls slightly depressed round the upper part, concentrically ornamented with longitudinal waved ribs; whitish.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

A delicate smooth-ribbed shell in which the ribs are concentrically waved.

Species 285. (Mus. nost.)

PLEUROTOMA PAXILLUS. *Pleur. testâ abbreviato-ovatâ, spirâ apice acuminatâ; anfractibus supernè concavis, unicarinatis, medio creberrimè plicatis, plicarum interstitiis subtilissimè striatis, infernè liratis; sinu amplo; nigricante-fuscâ.*

THE LITTLE PEG PLEUROTOMA. Shell abbreviately ovate, spire acuminated at the apex; whorls concave round the top, with a small keel, very closely plicated in the middle, interstices between the folds finely striated, ridged round the bottom; sinus large; very dark brown.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

An extremely characteristic short stout dark brown species.

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Sowerby, del. et sculp.

Reeve, Brothers, imp.

PLEUROTOMA.

PLATE XXXII.

(Magnified to three times their natural size.)

Species 286. (Mus. Metcalfe.)

PLEUROTOMA SORDIDA. *Pleur. testâ ovatâ, longitudinaliter subobliquè costatâ, costarum interstitiis elevatis clathratis; sordidè albâ.*

THE SORDID PLEUROTOMA. Shell ovate, longitudinally somewhat obliquely ribbed, interstices between the ribs latticed with raised striæ; dull white.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

Whorls a little depressed at the sutures.

Fig. 288.—*Pleurotoma hyalina* (ante Fig. 269.)

For species 287 see pl. xxxix.

Species 288. (Mus. Cuming.)

PLEUROTOMA PLURICARINATA. *Pleur. testâ subfusiformi-oblongâ, carinis plurimis acutis cingulatâ, quarum interstitiis striis longitudinalibus cancellatis; aperturâ oblongâ, sinu subamplo; canali leviter recurvo; lutescente, aurantio-fusco pallidè strigato-tinctâ.*

THE NUMEROUS-KEELED PLEUROTOMA. Shell somewhat fusiformly oblong, encircled with numerous sharp keels, the interstices between which are cancellated with longitudinal striæ; aperture oblong, sinus rather large, canal slightly recurved; yellowish, stained here and there with streaks of orange-brown.

REEVE, Pro. Zool. Soc., 1845.

Hab. Island of Burias, Philippines (found in sandy mud at the depth of seven fathoms); Cuming.

A distinct and well-marked species.

Species 289. (Mus. Forbes.)

PLEUROTOMA CYCLADENSIS. *Pleur. testâ fusiformi-oblongâ, turritâ, anfractibus supernè rotundatis, longitudinaliter costatis, striis elevatis conspicuè cingulatis; aperturâ oblongâ, sinu amplo; albidâ, suturis pallidè fuscis, anfractu ultimo zonâ fuscescente angustâ cingulato.*

THE CYCLADES PLEUROTOMA. Shell fusiformly oblong, turreted, whorls rounded at the upper part, longitudinally ribbed, conspicuously encircled with raised striæ; aperture oblong, sinus large; whitish, sutures pale brown, last whorl encircled with a narrow pale brown zone.

Hab. Island of Paros, Grecian Archipelago; Forbes.

The ribs are narrow and compressed and the transverse striæ have the appearance of fine cords.

Species 290. (Mus.) Forbes.)

PLEUROTOMA LOEVIANA. *Pleur. testâ fusiformi-turritâ, confertim concentricè costatâ, costis supernè leviter mucronatis, interstitiis substriatis; canali brevissimo, truncato; fuscâ.*

LOEVAN'S PLEUROTOMA. Shell fusiformly turreted, closely concentrically ribbed, ribs slightly pointed at the upper part, interstices faintly striated; canal rather short truncated; brown.

Hab. Ægean Sea (forty-eight fathoms); Forbes.

A dull brown shell closely concentrically ribbed.

Species 291. (Mus. Forbes.)

PLEUROTOMA LÆVIGATA. *Pleur. testâ subulatâ, lævigatâ, aut concentricè subtilissimè striatâ; canali brevissimo, truncato; albidâ, anfractibus fasciis plumbo-fuscis duabus ornatis.*

THE SMOOTH PLEUROTOMA. Shell subulate, smooth, or very faintly concentrically striated; canal very short, truncated; whitish, whorls ornamented with lead-brown bands.

PHILIPPI, Enum. Moll. Sicil., vol. i. p. 199. pl. xi. f. 17.

Hab. Island of Paros, Grecian Archipelago; Forbes.

A small smooth acicular species.

Species 292. (Mus. Cuming.)

PLEUROTOMA COMPTA. *Pleur. testâ ovatâ, spirâ nodoso-turritâ, anfractibus supernè concavis, infra latè costatis, liris angustis transversim funiculatis; labro incrassato, intus denticulato, sinu amplo, lato; lutescente-albâ.*

THE NEAT PLEUROTOMA. Shell ovate, spire nodosely turreted, whorls hollow round the upper part, broadly

ribbed, and corded with narrow transverse striæ; lip thickened, denticulated within, sinus large, broad; yellowish white.

REEVE, Pro. Zool. Soc., 1845.

Hab. Baclayon, Island of Bohol, Philippines (found under stones at low water on the reefs); Cuming.

An elegant and most symmetrically formed shell.

Species 293. (Mus. Cuming.)

PLEUROTOMA HEXAGONALIS. *Pleur. testâ pyramidali-ovatâ, anfractibus costis sinis continuis longitudinaliter ornatis; aperturâ parvâ, sinu distincto; fuscescente-albâ.*

THE HEXAGONAL PLEUROTOMA. Shell pyramidally ovate, whorls ornamented longitudinally with six continuous ribs; aperture small, sinus distinct; brownish white.

REEVE, Pro. Zool. Soc., 1845.

Hab. Loay, Island of Bohol, Philippines (found in sandy mud at the depth of seventeen fathoms); Cuming.

A small pyramidal six-sided shell resulting from the continuous arrangement of the ribs.

Species 294. (Mus. Cuming.)

PLEUROTOMA ARCTATA. *Pleur. testâ pyramidali-elongatâ, anfractibus obliquè costatis, costis striis elevatis funiculatis; labro incrassato, peculiariter effuso, sinu amplo; sordidè albâ.*

THE NARROW PLEUROTOMA. Shell pyramidally elongated, whorls obliquely ribbed, ribs corded with raised striæ; lip thickened, peculiarly effused, sinus large; dull white.

REEVE, Pro. Zool. Soc., 1845.

Hab. Island of Corrigidor, Philippines (found among coarse sand at the depth of seven fathoms); Cuming.

Allied to the *Pleurotoma spurca*, but of a narrower and more subulate growth.

Fig. 295.—The shell here represented proves to be the young spiral portion of a species of *Mangelia*.

For Species 295 see pl. XXXIX.

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Sowerby. del. et sculp.

Reeve, Brothers, imp.

PLEUROTOMA.

PLATE XXXIII.

(All magnified to three times their natural length.)

Species 296. (Mus. nost.)

PLEUROTOMA LINEARIS. *Pleur. testâ ovatâ, subfusiformi, anfractibus rotundatis, fortiter longitudinaliter costatis, costis nodulosis; albidâ, lineis subtilibus castaneis cingulatâ, labri limbo violaceo.*

THE LINEAR PLEUROTOMA. Shell ovate, somewhat fusiform, whorls rounded, strongly longitudinally ribbed, ribs nodulous; whitish, encircled with very fine chesnut-brown lines, edge of the lip tinged with violet.

Murex linearis, Montagu, Test. Brit. p. 261. pl. 9. f. 4.

Pleurotoma concinna, Scacchi.

Hab. Britain. Mediterranean.

A very characteristic shell, encircled with fine conspicuous brown lines which appear in the interstices between the ribs.

Species 297. (Mus. Gray.)

PLEUROTOMA TRIFASCIATA. *Pleur. testâ subfusiformi-ovatâ, basi leviter contractâ; anfractibus supernè subplanulatis, longitudinaliter creberrimè subtilissimè costatis, transversim impresso-striatis; albidâ, lineis tribus aurantio-fuscis cingulatâ; labro subincrassato, sinu distincto.*

THE THREE-BANDED PLEUROTOMA. Shell somewhat fusiformly ovate, slightly contracted at the base; whorls a little flattened round the top, longitudinally very closely ribbed, transversely impressly striated; whitish, encircled with three fine orange-brown lines; lip rather thickened, sinus distinct.

GRAY, MSS. (private cabinet).

Hab. ——?

Encircled with three fine lines, only the first of which appears on the upper whorls.

Species 298. (Mus. Gray.)

PLEUROTOMA COSTATA. *Pleur. testâ oblongo-ovatâ, subfusiformi, anfractibus supernè subplanulatis, longitudinaliter creberrimè costatis, transversim impresso-striatis; labro leviter incrassato, sinu distincto; albidâ, lutescente pallidè fasciatâ.*

THE RIBBED PLEUROTOMA. Shell oblong-ovate, somewhat fusiform, whorls a little flattened round the upper part, longitudinally very closely ribbed, transversely impressly striated; lip slightly thickened, sinus distinct, whitish, banded with pale yellow.

GRAY, MSS. (private cabinet).

Hab. Island of St. Vincent, West Indies.

Approximates rather to the former species, but of a different form and wanting the band-like lines.

Species 299. (Mus. nost.)

PLEUROTOMA COCCINATA. *Pleur. testâ ovatâ, apicem versus acuminatâ, anfractibus lævigatis, supernè concavis, infra plicato-nodosis; basi truncatâ; albâ, inter nodos dorsoque coccinatâ.*

THE SCARLET-STAINED PLEUROTOMA. Shell ovate, acuminated towards the apex, whorls smooth, concave round the upper part, plicately nodose beneath; base truncated; white, stained with rose-scarlet on the back and between the nodules.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

Peculiarly stained with bright rose-scarlet.

Species 300. (Mus. Cuming.)

PLEUROTOMA VITREA. *Pleur. testâ cylindraceo-elongatâ, basi leviter contractâ, tenui, pellucidâ, vitreâ, lævigatâ, anfractibus supernè et infernè subtilissimè sulcatis; albidâ.*

THE GLASSY PLEUROTOMA. Shell cylindrically elongated, slightly contracted at the base, thin, pellucid, glassy, smooth, whorls very finely grooved round the upper and lower parts; whitish.

REEVE, Pro. Zool. Soc., 1845.

Hab. Singapore and Island of Mindanao, Philippines (found at depths of seven and twenty-five fathoms); Cuming.

A very peculiar transparent glassy shell.

Species 301. (Mus. Metcalfe.)

PLEUROTOMA FORAMINATA. *Pleur. testâ fusiformi-ovatâ, liris angustis longitudinalibus et transversis creberrimè clathratis; lutescente.*

THE PIERCED PLEUROTOMA. Shell fusiformly ovate, very closely latticed with narrow longitudinal and transverse striæ, yellowish.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

A close deeply-latticed shell.

Species 302. (Mus. Cuming.)

PLEUROTOMA EFFICTA. *Pleur. testâ ovatâ, spirâ breviusculâ, acuminatâ, longitudinaliter subconcentricè costatâ, costis striis elevatis cancellatis; aperturâ subamplâ, labro incrassato, sinu latiusculo.*

THE ENGRAVED PLEUROTOMA. Shell ovate, spire rather short, acuminated, longitudinally somewhat concentrically ribbed, ribs cancellated with raised striæ; aperture rather large, lip thickened, sinus rather large.

REEVE, Pro. Zool. Soc., 1845.

Hab. ——?

Very like one of the minute species of Triton.

Species 303. (Mus. Cuming.)

PLEUROTOMA CAVERNOSA. *Pleur. testâ oblongâ, spirâ angulato-turritâ, anfractibus supernè subangulatis, longitudinaliter costatis, costis distantibus, liris angustis elevatiusculis transversis clathratis, anfractu ultimo prope basem peculiariter cavernoso; fuscâ, liris costas super albicantibus.*

THE CAVERNOUS PLEUROTOMA. Shell oblong, spire angularly turreted, whorls slightly angulated round the upper part, longitudinally ribbed, ribs distant, latticed with narrow raised transverse ridges, last whorl peculiarly cavernous near the base; brown, ridges whitish on the ribs.

REEVE, Pro. Zool. Soc. 1845.

Hab. Philippine Islands; Cuming.

Remarkable on account of its having a deep cavernous groove around the base.

Species 304. (Mus. Cuming.)

PLEUROTOMA POLYNESIENSIS. *Pleur. testâ acuminato-turritâ, anfractibus parvis, rotundatis, longitudinaliter crebricostatis, transversim striatis; labro incrassato, sinu amplo; albicante.*

THE POLYNESIAN PLEUROTOMA. Shell acuminately turreted, whorls small, round, longitudinally closely ribbed, transversely striated; lip thickened, sinus large; whitish.

REEVE, Pro. Zool. Soc., 1845.

Hab. Lord Hood's Island; Cuming.

May be distinguished by its little numerous rounded whorls

Species 171. (Mus. Gray)

PLEUROTOMA APICATA. *Pleur. testâ oblongo-ovatâ, anfractibus supernè concavis, subtilissimè unicarinatis, infra nodoso-plicatis, plicis infernè evanidis, transversim impresso-striatis; columellâ callositate supernè munitâ; luteâ, apice rufescente.*

THE TUFTED PLEUROTOMA. Shell oblong-ovate, whorls concave round the upper part, encircled with a very fine keel, nodosely plaited beneath, plaits fading away towards the lower part, transversely impressly striated; columella furnished with a callosity at the upper part; pale yellow, reddish at the apex.

GRAY, MSS. (private cabinet).

Hab. ——?

A peculiarly coloured shell, yellow with pink apex, with a marked concavity round the whorls next the sutures.

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LIBRARY OF THE ROYAL ASIATIC SOCIETY

PLEUROTOMA.

PLATE XXXIV.

Species 306, (Mus. Taylor.)

(Magnified to twice its natural length.)

PLEUROTOMA VIRIDULA. *Pleur. testâ ovatâ, subventricosâ, tenui, semipellucidâ, lævigatâ, aut transversim minutissimè impresso-striatâ; albâ, nitidâ,*

THE GREENISH PLEUROTOMA. Shell ovate, somewhat ventricose, thin, semi-transparent, smooth or transversely very minutely impressly striated; white, shining.

Defrancia viridula, Möller.

Hab. Greenland.

A smooth semi-transparent greenish white shell.

Species 307. (Mus. Hankey.)

(Natural size.)

PLEUROTOMA SINUOSA. *Pleur. testâ pyramidali-ovatâ, solidâ, basi truncatâ, anfractibus supernè concavis, infra fortiter tuberculato-costatis, costis obliquè sinuosis, transversim fortissimè crebristriatis; dorso gibboso; sinu amplo, rotundato; albâ, fasciâ unicâ fuscescente indistinctâ.*

THE SINUOUS PLEUROTOMA. Shell pyramidally ovate, solid, truncated at the base, whorls concave round the upper part, tubercularly ribbed beneath, ribs obliquely sinuous, transversely very strongly closely striated; back gibbous, sinus large, rounded; white, encircled with an indistinct brown band.

GRAY, MSS. (private cabinet).

Hab. ——?

A solid white shell, very faintly banded, remarkably strongly ribbed and striated.

Species 308. (Mus. Belcher.)

PLEUROTOMA AMABILIS. *Pleur. testâ ovatâ, turritâ, pallidè aurantiacâ; anfractibus septenis, subrotundis, costulatis, transversim striatis; costulis rotundatis, subdistantibus; suturâ maculis albis ornatâ; anfractu ultimo fasciâ albâ angustâ cincto.*

THE LOVELY PLEUROTOMA. Shell ovate, turreted, pale orange; whorls seven in number, somewhat round, ribbed, transversely striated; ribs rounded, rather distant; suture ornamented with white spots; last whorl encircled with a narrow white band.

Clavatula amabilis, Hinds, Moll. Voy. Sulph., p.21. pl.7. f.3.

Hab. Straits of Malacca (from seventeen fathoms mud); Hinds.

A pretty *Scalaria*-like species.

Species 309. (Mus. Gray.)

(Magnified to twice its natural length.)

PLEUROTOMA AFFINIS. *Pleur. testâ pyramidali-oblongâ, anfractibus supernè concavis, tenuissimè striatis, infra longitudinaliter costatis, transversim liratis, aperturâ parviusculâ, lutescente.*

THE ALLIED PLEUROTOMA. Shell pyramidally oblong, whorls hollow round the upper part, very finely striated, longitudinally ribbed and transversely ridged beneath, aperture rather small, yellowish.

GRAY, MSS. (private cabinet.)

Hab. Island of St. Vincent, West Indies; Guilding.

Of a peculiar yellow tinge.

Species 310. (Mus. Cuming.)

PLEUROTOMA DELICATA. *Pleur. testâ subulatâ, tenui, hyalinâ, transversim minutè et creberrimè elevato-striatâ, aperturâ brevi; pellucido-albâ, aurantio pallidissimè maculatâ.*

THE DELICATE PLEUROTOMA. Shell subulate, thin, hyaline, transversely minutely and very closely elevately striated, aperture short; transparent white, very palely spotted with orange.

Hab. Lord Hood's Island, Pacific Ocean; Cuming.

An elongated transparent bulimoid shell.

Species 311. (Mus. Cuming.)

PLEUROTOMA AXIS. *Pleur. testâ recto-acuminatâ, infernè contractâ, anfractibus supernè bicarinatis, infra transversim exiliter liratis, aperturâ oblongâ, sinu profundo, albidâ, aurantio-fusco subindistinctè tinctâ.*

THE AXLE PLEUROTOMA. Shell straightly acuminated, contracted at the upper part, whorls two-keeled round

the upper part, transversely faintly ridged beneath, aperture oblong, sinus deep; whitish, somewhat indistinctly stained with orange-brown.

REEVE, Pro. Zool. Soc., 1846.

Hab. Philippine Islands; Cuming.

The sinus which is formed between the two keels is unusually deep.

Species 312. (Mus Belcher.)

PLEUROTOMA SPURCA. *Pleur. testâ ovatâ, acuminatâ, anfractibus rotundatis, costulatis, lineis duabus vel tribus elevatis fuscis decussatis, minutissimè transversim striatis, labro juxta suturam incrassato, intus crenulato, sinu amplo, lato.*

THE DIRTY PLEUROTOMA. Shell ovate, acuminated, whorls rounded, ribbed, decussated with two or three brown lines, transversely very minutely striated, lip thickened next the spire, crenulated within, sinus large, broad.

Clavatula spurca. Hinds, Moll. Voy. Sulphur, p. 17. pl. 5. f. 14.

Hab. New Guinea and Straits of Malacca (in from five to eighteen fathoms mud); Hinds.

A stout shell partaking of the form of the *P. argillacea.*

Species 313. (Mus. Cuming.)

PLEUROTOMA CREBRIPLICATA. *Pleur. testâ ovatâ, infernè ventricoso-sinuatâ, anfractibus concentricè crebriplicatis, transversim crebriliratis, aperturâ patulâ; albidâ, aurantio-fusco profusè variegatâ.*

THE CLOSELY-PLAITED PLEUROTOMA. Shell ovate, ventricosely sinuated, whorls concentrically closely plaited, transversely closely ridged; aperture wide open; white, profusely variegated with rich orange-brown.

REEVE, Pro. Zool. Soc., 1846.

Hab. Bolinao, Island of Luzon, Philippines (found under stones at low water); Cuming.

A richly painted shell disposed in close concentric plaits crossed by fine ridges.

Species 315. (Mus. nob.)

PLEUROTOMA ROSARIA. *Pleur. testâ abbreviato-subulatâ, basi truncatâ, anfractibus concentricè plicatis, lævibus, aperturâ brevi, vividè coccineo-roseâ, anfractuum parte supremâ albizonatâ.*

THE ROSE-STAINED PLEUROTOMA. Shell shortly subulate, truncated at the base, whorls concentrically plaited, smooth, aperture short; bright scarlet-rose, uppermost part of the whorls white-zoned.

REEVE, Pro. Zool. Soc. 1846.

Hab.——?

A delicately coloured species peculiarly distinct from any other.

Species 315. (Mus. Cuming.)

PLEUROTOMA DYSONI. *Pleur. testâ ovatâ, spirâ subturritâ, anfractibus supernè concavis et obtusè carinatis, infra rotundatis, longitudinaliter costatis, liris transversis decussatis, aperturâ brevi, sinu amplo; castaneo-fuscâ, anfractuum parte superiori hic illic interruptè albifasciatâ.*

DYSON'S PLEUROTOMA. Shell ovate, spire turreted, whorls concave and obtusely keeled round the upper part, rounded beneath, longitudinally ribbed, decussated with transverse ridges, aperture short, sinus large; chesnut-brown, upper part of the whorls here and there interruptedly white-banded.

REEVE, Pro. Zool. Soc., 1846.

Hab. Honduras; Dyson.

I have much pleasure in naming this shell, at the request of Mr. Cuming, after Mr. Dyson, whose adventurous researches after objects of natural history in a country not the most healthy for European travellers are certainly worthy of being recorded.

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Sowerby, del. et sculp.

Reeve Brothers, imp.

PLEUROTOMA.

PLATE XXXV.

(Magnified to about twice their length.)

Species 316. (Mus. Taylor.)

PLEUROTOMA LIVIDA. *Pleur. testâ ovatâ, subventricosâ, tenui, lævigatâ, basi truncatâ; intus extusque lividofuscâ; labro simplici, sinu lato.*

THE LIVID PLEUROTOMA. Shell ovate, somewhat ventricose, thin, smooth, truncated at the base; livid brown within and without; lip simple, sinus broad.

Defrancia livida, Möller.

Hab. Greenland.

A thin, smooth, dull brown semitransparent shell.

Species 317. (Mus. Gray.)

PLEUROTOMA CANCELLATA. *Pleur. testâ pyramidali, anfractibus supernè carinatis, transversim tenuissimè liratis, liris striis longitudinalibus cancellatis, aperturâ parvâ; aterrimâ, liris sordidè albis.*

THE CANCELLATED PLEUROTOMA. Shell pyramidal, whorls keeled at the upper part, transversely very finely ridged, ridges cancellated with longitudinal striæ, aperture small; jet black, ridges dirty white.

GRAY, MSS. (private cabinet).

Hab. Island of St. West Indies; Guilding.

Species 318. (Mus. Cuming.)

PLEUROTOMA HONDURASENSIS. *Pleur. testâ oblongo-ovatâ, spirâ acutâ, anfractibus rotundatis, nodoso-costatis; cinereo luteoque alternatim fasciatâ; labro incrassato.*

THE HONDURAS PLEUROTOMA. Shell oblong-ovate, spire sharp, whorls rounded, nodosely ribbed; alternately banded with yellow and ash-colour; lip thickened.

REEVE, Pro. Zool. Soc., 1846.

Hab. Honduras; Dyson.

A very characteristic species.

Species 319. (Mus. Cuming.)

PLEUROTOMA FENESTRATA. *Pleur. testâ fusiformi-ovatâ, subinflatâ, tenui, pellucidâ, anfractibus rotundis, liris superficiariis subdistantibus undique clathratis, labro simplici, sinu latiusculo; pellucido-albâ, aurantio pallidè tinctâ.*

THE WINDOWED PLEUROTOMA. Shell fusiformly ovate, a little inflated, thin, pellucid; whorls round, latticed throughout with rather distant superficial ridges, lip simple, sinus rather broad; transparent white, faintly stained with orange.

REEVE, Pro. Zool. Soc., 1846.

Hab. Island of Mindoro, Philippines (found among coral sand at the depth of nine fathoms); Cuming.

The lattice sculpture is more apparent towards the apex.

Species 320. (Mus. Cuming.)

PLEUROTOMA STRIOLATA. *Pleur. testâ attenuato-fusiformi, anfractibus longitudinaliter costatis, costis angustis, elevatis, subdistantibus, transversim subtilissimè striatis; fulvo-flavescente, zonâ nigrâ angustâ cingulatâ.*

THE FINELY STRIATED PLEUROTOMA. Shell attenuately fusiform, whorls longitudinally ribbed, ribs narrow, elevated, rather distant, transversely very finely striated; fulvous yellow, encircled with a narrow black zone.

SCACCHI; Philippi, Enum. Moll. Sicil. vol. 2. p. 168.

Hab. Mediterranean.

Approximating somewhat in form to the *P. attenuata*

Species 321. (Mus Cuming.)

Although apparently distinct, the single specimen here figured is so much worn that I must hesitate to describe it as new.

Species 322. (Mus. nost.)

PLEUROTOMA SEPTANGULARIS. *Pleur. testâ subulatâ, lævigatâ, anfractibus supernè obtusè semicostatis, et septangularibus, labro valdè incrassato; roseo-albicante.*

THE SEPTANGULAR PLEUROTOMA. Shell subulate, smooth, whorls obtusely ribbed and septangular on the upper half, lip very much thickened; pinkish white.

Murex septangularis, Montagu, Testacea Britannica, p. 268. pl. 9. f. 5.

Hab. Britain.

A solid shell characterized by a row of short blunt ribs extending about half-way across the whorls from the suture.

Species 323. (Mus. Metcalfe.)

PLEUROTOMA GRANICOSTATA. *Pleur. testâ abbreviato-ovatâ, basi truncatâ, spirâ brevi, anfractibus pulcherrimè granoso-costatis, liris transversis clathratis; albidâ, roseo-fuscescente tinctâ, granis saturatioribus.*

THE GRAIN-RIBBED PLEUROTOMA. Shell shortly ovate, truncated at the base, spire short, whorls very beautifully grain-ribbed, latticed with transverse ridges; whitish, stained with pinkish brown, grains of a darker tinge.

Species 324. (Mus. Taylor.)

PLEUROTOMA MOLLERI. *Pleur. testâ ovatâ, tenui, anfractibus supernè peculiariter depresso-angulatis, longitudinaliter creberrimè plicatis; sordidè albâ.*

MOLLER'S PLEUROTOMA. Shell ovate, thin, whorls peculiarly depressly angulated round the upper part, longitudinally very closely plicated; dirty white.

Defrancia lactea, Moller.

Hab. Greenland.

The name *lactea* being pre-occupied in reference to this genus, I dedicate the species to the eminent author of the Mollusca of Greenland whose loss the scientific world have so recently had occasion to deplore.

Species 325. (Mus. Cuming.)

(Natural size.)

PLEUROTOMA LYMNÆÆFORMIS. *Pleur. testâ ovatâ, tenui, inflatâ, striis longitudinalibus et transversis, creberrimè reticulatâ, aperturâ amplâ, sinu lato; albâ, aurantio-fusco tinctâ et maculatâ.*

THE LYMNÆA-SHAPED PLEUROTOMA. Shell ovate, thin, inflated, very closely reticulated with transverse and longitudinal striæ; aperture large, sinus broad, white, stained and spotted with orange-brown.

KIENER, Icon. Coq. vivantes, *Pleurotoma* p. 62. pl. 22. f. 3.

Hab. Philippine Islands; Cuming.

This is the nearest approach of any shell I have to M. Kiener's *P. Lymnææformis*.

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Sowerby, del. et sculp.

Reeve, Brothers, imp.

PLEUROTOMA.

PLATE XXXVI.

Species 326. (Mus. nost.)

(Magnified to one and a half times its length.)

PLEUROTOMA REGULARIS. *Pleur. testâ subpyramidali-ovatâ, anfractibus supernè concavis, medio obliquè regulariter costatis, aperturâ parvâ, sinu lato; albidâ.*

THE REGULAR PLEUROTOMA. Shell somewhat pyramidally ovate, whorls hollow round the upper part, obliquely regularly ribbed, aperture small, sinus broad; whitish.

REEVE, Pro. Zool. Soc. 1846.

Hab.——?

Whorls obliquely ribbed round the middle with a peculiar degree of regularity.

Species 327. (Mus. Metcalfe.)

PLEUROTOMA ANGICOSTATA. *Pleur. testâ oblongo-ovatâ, spirâ turritâ, lævigatâ, anfractibus longitudinaliter costatis, costis subdistantibus, angustis, supernè angulatis, submucronatis; niveâ.*

THE NARROW-RIBBED PLEUROTOMA. Shell oblong-ovate, spire turreted, smooth, whorls longitudinally ribbed, ribs rather distant, narrow, angulated and rather pointed at the upper part; snowy white.

REEVE Pro. Zool. Soc. 1846.

Hab.——?

A pure white hexagonal shell.

Species 328. (Mus. Metcalfe.)

(Magnified to two and a half times its length.)

PLEUROTOMA MUCRONATA. *Pleur. testâ acuminato-pyramidali, anfractibus longitudinaliter subobscurè plicato-costatis, costis nodulosis, aperturâ brevi; fuscâ, nodorum serie medianâ albicante.*

THE POINTED PLEUROTOMA. Shell acuminately pyramidal, whorls somewhat obscurely plicately ribbed, ribs nodulous, aperture short; brown, middle row of nodules whitish.

REEVE. Pro. Zool. Soc. 1846.

Hab.——?

An interesting well-defined species.

Species 329. (Mus. Cuming.)

(Magnified to one and a half times its length.)

PLEUROTOMA CAGAYANENSIS. *Pleur. testâ fusiformi-ovatâ, spirâ acuminatâ, anfractibus supernè unicarinatis-infra tuberculato-plicatis, transversim conspicuè liratis; sinu amplo; albâ.*

THE CAGAYAN PLEUROTOMA. Shell somewhat fusiformly ovate, spire acuminated, whorls encircled with a keel round the upper part, tubercularly plicated beneath, transversely conspicuously ridged; sinus large; white.

REEVE, Pro. Zool. Soc. 1846.

Hab. Cagayan, Province of Misamis, Island of Mindanao, Philippines (found in sandy mud at the depth of seven fathoms); Cûming.

The tubercular plaits are faintly tinged with brown.

Species 330. (Mus. Belcher.)

PLEUROTOMA PARTITA. *Pleur. testâ subpyriformi, spirâ grandi, breviusculâ, suturâ profundâ, amplâ, septis numerosis partitâ; anfractibus subtiliter striatis, sinu lato, profundo; albidâ aut lutescente*

THE PARTITIONED PLEUROTOMA. Shell somewhat pyriform, spire large, rather short, suture deep, large, divided by numerous septa; whorls finely striated, sinus broad, deep; whitish or yellowish.

Conopleura striata, Hinds.

Hab. New Guinea (in seven fathoms mud); Hinds.

The honey-combed sculpture of the suture is very remarkable

Species 331. (Mus. Cuming.)

(Magnified to twice its length.)

PLEUROTOMA TESSELLATA. *Pleur. testâ pyramidali, anfractibus supernè concavis, medio confertim tuberculato-plicatis, aperturâ parvâ; albâ, maculis grandibus conspicuis rufo-fuscis tessellatâ.*

THE TESSELLATED PLEUROTOMA. Shell pyramidal, whorls concave round the upper part, closely tubercularly, plaited in the middle, aperture small; white, tessellated with large conspicuous reddish brown spots.

REEVE, Pro. Zool. Soc. 1846.

Hab. Isle of Capul, Philippines (on the reefs.); Cuming.

A very characteristic species, and easily recognized by its style of colouring.

Species 332. (Mus. Taylor.)

(Magnified to twice its length.)

PLEUROTOMA VAHLII. *Pleur. testâ tenui, oblongâ, spirâ acuminatâ, suturâ subprofundâ, anfractibus rotundatis, flexuosè plicatis; intus extusque cinereo-fuscâ, columellâ albâ.*

VAHL'S PLEUROTOMA. Shell thin, oblong, spire acuminated, suture rather deep, whorls rounded, flexuously plaited; ashy brown within and without, columella white.

Defrancia Vahlii, Möller.

Hab, Greenland.

The sinus of this species is probably represented by little more than a slight indenture.

Species 333. (Mus. Cuming.)

(Magnified to nearly three times its natural length.)

PLEUROTOMA SEMEN. *Pleur. testâ oblongâ, spirâ mucronatâ, anfractibus lævibus, medio obliquè plicatis, aperturâ parvâ, sinu profundo; castaneo-fuscâ, plicis albidis.*

THE SEED PLEUROTOMA. Shell oblong, spire pointed, whorls smooth, obliquely plaited in the middle, aperture small, sinus deep; chesnut-brown, plaits whitish.

REEVE, Pro. Zool. Soc., 1846.

Hab. San Nicolas, Island of Zebu, Philippines (under stones at low water); Cuming.

A small brown species, the whorls of which are encircled round the middle by a row of short oblique white plaits.

Species 334. (Mus. Cuming.)

PLEUROTOMA PARIA. *Pleur. testâ oblongâ, spirâ acuminato-turritâ, anfractibus supernè concavis, infra plicato-costatis, costis angustis, subflexuosis; albâ, fasciâ pallidè aurantiâ indistinctâ cingulatâ.*

THE PARIAN PLEUROTOMA. Shell oblong, spire acuminately turreted, whorls concave round the upper part, plicately ribbed beneath, ribs narrow, rather flexuous; white, encircled with a very faint indistinct orange band.

REEVE, Pro. Zool. Soc. 1846.

Hab. ——?

This shell has a beautiful opake white marble appearance.

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PLEUROTOMA.

PLATE XXXVII.

Species 335. (Mus. Belcher.)

(Natural size.)

PLEUROTOMA PAPILLARIS. *Pleur. testâ oblongâ, lævigatâ, anfractibus rotundatis, obsoletè tuberculato-costatis, spiræ apice papilloso, aperturâ brevi; pallidè rosaceâ, labri limbo intus rufescente.*

THE PAPILLARY PLEUROTOMA. Shell oblong, smooth, whorls rounded, obsoletely tubercularly ribbed, apex of the spire papillary, aperture short; pale pinkish, edge of the lip tinged within with red.

Clavatula papillaris, Hinds, Moll. Voy. Sulphur, p. 22. pl. 7. f. 2.

Hab. Straits of Malacca (from seventeen fathoms mud); Hinds.

Peculiar in its colouring, and papillary apex.

Species 336. (Mus. Belcher.)

(Natural size.)

PLEUROTOMA CASTA. *Pleur. testâ attenuatè fusiformi, fragili, vitreâ, transversim sulcatâ, columellâ contortâ; pallidè rosaceâ.*

THE CHASTE PLEUROTOMA. Shell alternately fusiform, glassy, transversely grooved, columella twisted; faintly tinged with pink.

Daphnella casta, Hinds, Moll. Voy. Sulphur, p. 25. pl. 7. f. 20.

Hab. Gulf of Nicoya, Central America (in twenty-three fathoms, among mud); Hinds.

A delicate and most elegantly formed shell.

Species 337. (Mus. Gray.)

(Magnified to twice its length.)

PLEUROTOMA LINEOLATA. *Pleur. testâ subfusiformi-oblongâ, longitudinaliter obtusè costatâ; albicante, lineis subtilissimis fuscescentibus cingulatâ.*

THE FINE-LINED PLEUROTOMA. Shell somewhat fusiformly oblong, longitudinally obtusely ribbed; whitish, encircled with very fine brown lines.

GRAY, MSS. (private cabinet).

Hab. —— ?

This little species may be known by the fine hair lines with which it is encircled; the ribs have not that granular appearance represented in the figure.

Species 338. (Mus. Metcalfe.)

(Magnified to three times its length.)

PLEUROTOMA SCALPTA. *Pleur. testâ pyramidali-ovatâ, lævigatâ aut minutissimè reticulatâ, aperturâ brevi, sinu distincto; albâ, lineis fuscis brevibus tessellatim pictâ.*

THE SCRATCHED PLEUROTOMA. Shell pyramidally ovate, smooth or very minutely reticulated, aperture short, sinus distinct; white, tessellately painted with short brown lines.

REEVE, Pro. Zool. Soc., 1847.

Hab. —— ?

Very significally tessellated with squares, each of four short parallel brown lines.

Species 339. (Mus. Forbes.)

(Magnified to three times its length.)

PLEUROTOMA FORBESII. *Pleur. testâ turritâ, anfractibus rotundatis, longitudinaliter obtusè costatis, transversim liratis, aperturâ parvâ; rufescente-fuscâ, liris saturatioribus.*

FORBES' PLEUROTOMA. Shell tureted, whorls rounded, longitudinally obtusely ribbed, transversely finely ridged, aperture small, reddish brown, ridges of deeper colour.

Hab. Paros, Grecian Archipelago; Forbes.

I have much pleasure in dedicating this little species to Professor Edward Forbes, whose submarine researches among the islands of the Grecian Archipelago, have afforded matter of so much interest and novelty.

Species 340. (Mus. Cuming.)

(Magnified to two and a half times its length.)

PLEUROTOMA SYMMETRICA. *Pleur. testâ ovatâ, spirâ breviusculâ, anfractibus supernè depressis, longitudinaliter costatis, costarum interstitiis subtilissimè elevato-striatis; lutescente, anfractuum parte superiori albâ.*

THE SYMMETRICAL PLEUROTOMA. Shell ovate, spire rather short, whorls depressed at the upper part, longitudinally ribbed, interstices between the ribs very finely elevately striated; yellowish, upper part of the whorls white.

REEVE, Pro. Zool. Soc., 1846.

Hab. —— ?

A neat elegantly formed shell, partaking of the generic character of *Mangelia*.

Species 341. (Mus. Cuming.)

(Magnified to three times its length.)

PLEUROTOMA CORNEA. *Pleur. testâ ovatâ, spirâ acuminatâ, corneâ, subpellucidâ, concentricè tenuicostatâ; fuscescente, zonâ angustâ pallidâ cingulatâ.*

THE HORNY PLEUROTOMA. Shell ovate, spire acuminated, horny, semi-transparent, concentrically finely ribbed; light brown, encircled by a narrow pale zone.

REEVE, Pro. Zool. Soc., 1846.

Hab. —— ?

Ribs of a very delicate character, flowing concentrically.

Species 342. (Mus. Metcalfe.)

(Magnified to three times its length.)

PLEUROTOMA FOVEOLATA. *Pleur. testâ ovatâ, liris fortibus elevatis undique reticulatis, liris ad decussationem granosis; albâ.*

THE PITTED PLEUROTOMA. Shell ovate, reticulated throughout with strong elevated ridges, granose at the point of crossing; white.

REEVE, Pro. Zool. Soc., 1846.

Hab. —— ?

The interstices between the reticulations are peculiarly deeply pitted.

Species 343. (Mus. Taylor.)

(Magnified to two and a half times its length.)

PLEUROTOMA GREENLANDICA. *Pleur. testâ tenui, ovatâ, transversim creberrimè elevato-striatâ, striis subirregularibus, spiræ suturâ subprofundâ; sordidè albâ aut fuscescente.*

THE GREENLAND PLEUROTOMA. Shell thin, ovate, transversely very closely elevately striated, striæ somewhat irregular, suture of the spire rather deep; dirty white or brownish.

Defrancia suturalis, Möller.

Hab. Greenland.

Another of the little group which has been distinguished by a new generic title in compliment to M. Defrance.

Species 344. (Mus. Cuming.)

(Magnified to twice its length.)

PLEUROTOMA PAGODA. *Pleur. testâ pyramidali-acuminatâ, anfractibus longitudinaliter crassicostatis, transversim subtilissimè liratis, aperturâ brevi; olivaceo-fuscâ.*

THE PAGODA PLEUROTOMA. Shell pyramidally acuminated, whorls longitudinally stoutly ribbed, transversely very finely ridged, aperture short; olive brown.

REEVE, Pro. Zool, Soc., 1846.

Hab. —— ?

This little species has a peculiar pagoda-like form, from the strong ribs continuing one under the other.

Species 345. (Mus. Taylor.)

(Magnified to three times its length.)

PLEUROTOMA RUGULATUS. *Pleur. testâ ovatâ, anfractibus supernè angulatis, concentricè tenuicostatis, interstitiis subtilissimè elevato-striatis; sordidè albâ.*

THE WRINKLED PLEUROTOMA. Shell ovate, whorls angulated round the upper part, concentrically finely ribbed, interstices very finely elevately striated; dull white.

Defrancia rugulatus, Möller.

Hab. Greenland.

Another interesting species of the *Defrancia* group.

Species 346. (Mus. Cuming.)

(Magnified to twice its length.)

PLEUROTOMA SEMIGRANOSA. *Pleur. testâ acuminato-turritâ, anfractibus supernè concavis, medio nodoso-costatis, infra granosis, aperturâ parvâ; albidâ, fasciâ aurantiâ infernè cingulatâ.*

THE HALF-GRAINED PLEUROTOMA. Shell acuminately turreted, whorls concave round the upper part, nodosely ribbed in the middle, granulated beneath, aperture small; whitish, encircled round the lower part with an orange band.

REEVE, Pro. Zool. Soc., 1846.

Hab. —— ?

The variety of sculpture above described is very characteristic.

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Sowerby, del. et lith.

Reeve Brothers, imp.

PLEUROTOMA.

PLATE XXXVIII.

Species 347. (Mus. nost.)

(Magnified to twice its length.)

PLEUROTOMA TINCTA. *Pleur. testâ oblongo-ovatâ, anfractibus rotundis, longitudinaliter crassicostatis, liris transversis fortiter clathratis, interstitiis profundis, labro incrassato, sinu lato, canali subrecurvo; albâ, anfractibus supra et infra aurantio-fusco fasciatim maculatis.*

THE STAINED PLEUROTOMA. Shell oblong-ovate, whorls round, longitudinally stoutly ribbed, strongly latticed with transverse ridges, interstices deep, lip thickened, sinus broad, canal a little recurved; white, whorls stained above and below with orange-brown spots.

REEVE, Pro. Zool. Soc., 1846.

Hab. ——?

Partaking very much of the form of *Triton*.

Species 348. (Mus. Metcalfe.)

(Magnified to twice its natural length.)

PLEUROTOMA CANALICULATA. *Pleur. testâ ovato-turritâ, spiræ suturâ canaliculatâ, anfractibus striis elevatis, subtiliter clathratis, sinu amplo; albicante.*

THE CHANNELLED PLEUROTOMA. Shell ovately turreted, suture of the spire channelled, whorls finely latticed with raised striæ, sinus large; whitish.

REEVE, Pro. Zool. Soc. 1846.

Hab.——?

A light elegantly formed shell, contracted at the base.

Species 349. (Mus. Cuming.)

(Magnified to two and a half times its length.)

PLEUROTOMA FUSOIDES. *Pleur. testâ fusiformi, spirâ acuminatâ, anfractibus supernè angulatis, striis elevatis creberrimè reticulatis, labro subincrassato, sinu lato; albicante, intus fuscescente.*

THE FUSUS-LIKE PLEUROTOMA. Shell fusiform, spire acuminated, whorls angulated round the upper part, very closely reticulated with raised striæ, lip rather thickened, sinus broad; whitish, pale brown within.

REEVE, Pro. Zool. Soc., 1846.

Hab. Island of Mindanao, Philippines (found in sandy mud at the depth of twenty-five fathoms); Cuming.

A slender closely reticulated shell.

Species 350. (Mus. Metcalfe.)

(Magnified to twice its length.)

PLEUROTOMA ALBIFUNICULATA. *Pleur. testâ oblongâ, anfractibus rotundatis, longitudinaliter crebricostatis, liris subtilibus transversis funiculatis, canali subrecurvo, sinu lato; albicante, aurantio hic illic tinctâ, liris opalo-albis, apice rosaceo,*

THE WHITE-CORDED PLEUROTOMA. Shell oblong, whorls rounded, longitudinally closely ribbed, corded with fine transverse ridges, canal a little recurved, sinus broad; whitish, here and there stained with orange-brown, ridges opal white, apex pink.

REEVE, Pro. Zool. Soc., 1845.

Hab. South Pacific.

A most characteristic and interesting species.

Species 351. (Mus. Gray.)

(Magnified to twice its size.)

PLEUROTOMA PULCHRA. *Pleur. testâ ovatâ, solidiusculâ, spirâ acutâ, anfractibus supernè concavis, unicarinatis, medio tuberculatis, infra granosis; rubido-fuscâ, tuberculis albis.*

THE BEAUTIFUL PLEUROTOMA. Shell ovate, rather solid, spire sharp, whorls concave round the upper part, one-keeled, tuberculated round the middle, granose beneath, reddish-brown, tubercles white.

GRAY, MSS. (private cabinet).

Hab. Island of St. Vincents, West Indies; Guilding.

A stout elaborately sculptured shell.

Species 352. (Mus. Cuming.)

PLEUROTOMA ALBINODATA. *Pleur. testâ ovato-turritâ, medio gibbosâ, anfractibus supernè angulatis, ad angulum tuberculatis, transversim granoso-liratis; nigricante-fuscâ, tuberculis albis.*

THE WHITE-KNOBBED PLEUROTOMA. Shell ovately turreted, gibbous in the middle, whorls angulated at the upper part, tuberculated at the angle, transversely granosely ridged; blackish-brown, tubercles white.

REEVE, Pro. Zool. Soc., 1846.

Hab. —— ?

The white tubercles stand out in prominent relief upon the dark brown ground.

Species 353. (Mus. Cuming.)

(Magnified to twice its size.)

PLEUROTOMA SCARABÆUS. *Pleur. testâ obeso-ovatâ, spirâ brevi, apice elevato; lævigatâ, spirâ apicem versus obsoletè hexagonali; castaneo-fuscâ, anfractu ultimo zonâ subobscurâ lutescente cingulatâ, apice albo.*

THE BLACK-BEETLE PLEUROTOMA. Shell stoutly ovate, spire short, apex raised, smooth, spire obsoletely hexagonal towards the apex; dark chesnut brown, last whorl encircled with a narrow yellowish zone; apex white.

REEVE, Pro. Zool. Soc., 1846.

Hab. Honduras; Dyson.

This interesting little species from Honduras may be recognised without difficulty.

Species 354. (Mus. Gray.)

(Magnified to three times its length.)

PLEUROTOMA MARGARITIFERA. *Pleur. testâ subfusiformi, liris subtilibus creberrimè reticulatâ, canali leviter recurvo, sinu lato; albidâ, aurantio-fusco pallidè tessellatâ.*

THE PEARLY-LOOKING PLEUROTOMA. Shell somewhat fusiform, very closely reticulated with fine ridges, canal slightly recurved, sinus broad; whitish, faintly tessellated with orange brown.

GRAY, MSS. (private cabinet).

Hab. —— ?

Peculiarly closely reticulated.

Species 355. (Mus. nost.)

(Magnified to three times its length.)

PLEUROTOMA DÆDALA. *Pleur. testâ subfusiformi, anfractibus longitudinaliter tenuicostatis, interstitiis transversim creberrimè elevato-striatis, labro-incrassato; albidâ, fuscescente pallidissimè tinctâ.*

THE NEATLY-MADE PLEUROTOMA. Shell somewhat fusiform, whorls longitudinally finely ribbed, interstices transversely very closely elevately striated, lip thickened; whitish, very faintly tinged with light brown.

REEVE, Pro. Zool. Soc., 1846.

Hab. —— ?

Suture rather deeply impressed.

Species 356. (Mus. nost.)

PLEUROTOMA OBTUSA. *Pleur. testâ oblongâ, spirâ breviusculâ, obtusâ, anfractibus rotundis, obtuso-costatis, transversim tenuiliratis, labro incrassato, sinu lato; lutescente.*

THE OBTUSE PLEUROTOMA. Shell oblong, spire rather short, obtuse, whorls round, obtusely ribbed, transversely finely ridged, lip thickened, sinus broad; pale yellow.

REEVE, Pro. Zool. Soc., 1846.

Hab. —— ?

A peculiarly obtuse depressed spire.

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LIBRARY OF THE ROYAL SOCIETY

PLEUROTOMA.

PLATE XXXIX.

The species illustrated in this plate, on a highly magnified scale, have been kindly communicated by M. Alcide D'Orbigny, by whom they were dredged from very deep water in the West Indies.

Species 357.

PLEUROTOMA OCCIDENTALIS. *Pleur. testâ subfusiformi, anfractibus rotundatis longitudinaliter crebricostatis, costis liris angustis nodoso-decussatis; canali subelongato; rosaceo-fuscescente.*

THE WESTERN PLEUROTOMA. Shell somewhat fusiform, whorls rounded, longitudinally closely ribbed, ribs nodosely decussated with narrow ridges; canal a little elongated; pinkish-brown.

Hab. West Indies.

Distinguished by its rounded whorls, and general fusiform shape, somewhat abbreviated towards the canal.

Species 358.

PLEUROTOMA CANDIDULA. *Pleur. testâ subacuminato-fusiformi, anfractibus superne leviter depressis, longitudinaliter angiliratis, transversim striatis, canali subelongato, recto; sinu amplo; albicante, labri limbo rosaceo.*

THE WHITISH PLEUROTOMA. Shell rather acuminately fusiform, whorls slightly depressed round the upper part, longitudinally narrow-ribbed, transversely striated, canal a little elongated and straight; sinus large; whitish, lip edged with pink.

Hab. West Indies.

Of rather a more straightly fusiform growth than the preceding species.

Species 359.

PLEUROTOEA D'ORBIGNII. *Pleur. testâ fusiformi, acuminato turritâ, anfractibus rotundatis, liris subtilibus spiraliter cingulatis, canali breviousculo, sinu amplo; pallidè stramineo-albicante, labri limbo rosaceo.*

D'ORBIGNY'S PLEUROTOMA. Shell fusiform, acuminately turreted, whorls rounded, spirally encircled with fine ridges; canal rather short, sinus large; very pale straw-colour, edge of the lip conspicuously tinged with pink.

Hab. West Indies.

I dedicate this most delicate and beautiful of the series to the indefatigable naturalist to whom I am indebted for them.

Species 360.

PLEUROTOMA ANGULIFERA. *Pleur. testâ fusiformi, anfractibus peculiariter angulatis, longitudinaliter crebricostatis, costis ad angulum leviter nodosis, infernè elevato-striatis; canali breviusculo; anfractibus medio lutescentibus, supra et infra rubido-fuscis.*

THE ANGULIFEROUS PLEUROTOMA. Shell fusiform, whorls peculiarly angulated, longitudinally closely ribbed, ribs slightly nodose at the angle, elevately striated round the lower part; canal rather short; whorls yellowish round the middle, reddish brown above and below.

Hab. West Indies.

The ribs of this species assume a peculiarly angulated growth.

Species 361.

PLEUROTOMA CLATHRATA. *Pleur. testâ fusiformi, spirâ breviusculâ, anfractibus subventricosis, supernè leviter canaliculatis, liris subtilibus concentricis et transversis pulcherrimè clathratis; sinu amplo; fuscescente, rufo variegatâ.*

THE LATTICED PLEUROTOMA. Shell fusiform, spire rather short, whorls rather ventricose, slightly channelled round the upper part, very beautifully latticed with fine concentric and transverse ridges; sinus large; light brown variegated with red.

Hab. West Indies.

Easily distinguished by its delicate latticed sculpture

Species 262.

PLEUROTOMA MACROSTOMA. *Pleur. testâ ovato-fusiformi, spirâ breviusculâ obtusâ, anfractibus convexis, costis obtusis, obliquè concentricis, infernè evanidis, ornatis; canali peculiariter attenuato, aperturâ angustâ, sinuatâ; cæruleo-purpurascente, rubido lineatâ et variegatâ.*

THE LONG-MOUTH PLEUROTOMA. Shell ovately fusiform, spire rather short, obtuse, whorls convex, ornamented with obtuse obliquely concentric ribs, fading away towards the lower part; canal peculiarly attenuated, aperture narrow, sinuated; blueish-purple, lineated and variegated with red.

A curious obtuse shell very distinctly characterized.

Species 265.

PLEUROTOMA OBESICOSTATA. *Pleur. testâ subobeso-fusiformi, anfractibus angulatis, longitudinaliter costatis, costis obesis, transversim subtiliter liratis, canali brevissimo, truncato, sinu conspicuo; fuscâ.*

THE STOUT-RIBBED PLEUROTOMA. Shell obesely fusiform, whorls angulated, longitudinally ribbed, ribs stout, transversely finely ridged, canal very short, truncated, sinus conspicuous; brown.

Hab. West Indies.

The ribs appear to be of an unusually broad character.

Species 280.

PLEUROTOMA LAQUEATA. *Pleur. testâ ovato-turritâ, anfractibus angulatis, longitudinaliter costatis, costis obesis, remotiusculis, interstitiis striatis; canali truncato; aperturâ brevi; sordidè albidâ.*

THE FLUTED PLEUROTOMA. Shell ovately turreted, whorls angulated, longitudinally ribbed, ribs stout, rather remote, interstices striated; canal truncated; aperture short; dull white.

Hab. West Indies.

The sinus is not very distinct, but sufficiently so to entitle it to a place in the genus under consideration.

Species 295.

PLEUROTOMA TURBINELLOIDES. *Pleur. testâ obeso-ovatâ, utrinque attenuatâ, anfractibus rotundatis, longitudinaliter costatis; canali subelongato, sinu lato; albicante, lineis nigricantibus binis cingulatâ.*

THE TURBINELLA-LIKE PLEUROTOMA. Shell stoutly ovate, attenuated at both ends, whorls rounded, longitudinally ribbed; canal a little elongated, sinus broad; whitish, encircled with blackish lines in pairs.

Hab. West Indies.

Peculiar in form, and very characteristically marked.

Species 321.

PLEUROTOMA RUBRICATA. *Pleur. testâ ovatâ, spirâ angulato-acuminatâ, longitudinaliter costatâ, costis remotiusculis, interstitiis striatis; canali brevissimo, truncato; rubidâ.*

THE BRICK-RED PLEUROTOMA. Shell ovate, spire angularly acuminated, longitudinally ribbed, ribs rather distant, interstices striated canal very short, truncated; dull red.

Hab. West Indies.

The whorls are prominently angled in the middle, and at the angle are produced into a slight nodule.

ERRATUM.

PLATE XXXIX.—Instead of *Sowerby del. et sculp.*—read *Pretre del. Sowerby lith,*

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364.b

363.b

365.a

365.b

366.a

369.a

369.b

366.b

Sowerby, del. et lith.

Reeve, imp.

PLEUROTOMA.

PLATE XL.

Species 363. (Mus. Taylor.)

PLEUROTOMA SIGILLATA. *Pleur. testâ pyramidali-ovatâ, transversim subobscurè striatâ, anfractibus supernè canaliculatis, infra exiliter obliquè nodoso-plicatis, aperturâ breviusculâ, patulâ, basi truncatâ, pallidè rubido-castaneâ, fauce et columellâ luteo-albicantibus.*

THE CLAY PLEUROTOMA. Shell pyramidally ovate, transversely somewhat obscurely striated, whorls canaliculated round the upper part, faintly obliquely nodosely plicated beneath, aperture rather short, wide open, base truncated; pale reddish chesnut, aperture and columella yellowish-white.

Hab. —— ?

A solid rather obtuse shell of a reddish-clay colour.

Species 364. (Mus. Forbes.)

PLEUROTOMA MULTIPLICATA. *Pleur. testâ pyramidali, anfractibus rotundatis, longitudinaliter crebrè plicato-costatâ, transversim liratâ, liris angustis, subconspicuis, aperturâ parvâ, canali brevissimo; fuscâ.*

THE MANY-PLAITED PLEUROTOMA. Shell pyramidal, whorls rounded, longitudinally closely plicately ribbed, ridges narrow, rather conspicuous, aperture small, canal very short; brown.

Hab. Egean Sea; Forbes.

A small pyramidal shell of numerous whorls.

Species 365. (Mus. Forbes.)

PLEUROTOMA DELOSENSIS. *Pleur. testâ ovatâ, spirâ breviusculâ, anfractibus supernè angulatis, liris longitudinalibus et transversis conspicuè clathratis, aperturâ subamplâ, basi truncatâ; lutescente.*

THE DELOS PLEUROTOMA. Shell ovate, spire rather short, whorls angulated round the upper part, conspicuously latticed with longitudinal and transverse ridges, aperture rather large, base truncated; yellowish.

Hab. Island of Delos, Grecian Archipelago; Forbes.

An interesting small species, dredged by Professor Edward Forbes at the above-mentioned locality.

Species 366. (Mus. Taylor.)

PLEUROTOMA TAYLORIANA. *Pleur. testâ elongato-turritâ, anfractibus supernè obscurè carinatis, infra carinam concavis, medio conspicuè obliquè nodosis, transversim undique subtiliter striatis, striis elevatiusculis, granosis; sinu subamplo, basi truncatâ; luteo-albicante, striis transversis fusco-punctatis, anfractibus maculâ castaneâ prope suturam hic illic tinctis.*

TAYLOR'S PLEUROTOMA. Shell elongately turreted, whorls obscurely keeled round the upper part, hollowed beneath the keel, conspicuously obliquely noduled round the middle, transversely finely striated throughout, striæ rather elevated, granulated; sinus rather large, base truncated; yellowish white, transverse striæ dotted with brown, whorls stained here and there next the suture with a chesnut spot.

Hab. —— ?

I dedicate this interesting new species with a great deal of pleasure to its worthy possessor Thos. Lombe Taylor, Esq., a gentleman whose zeal in collecting shells is only equalled by his extreme readiness to communicate specimens, the investigation of which is at all likely to afford information.

Species 369. (Mus. Taylor.)

PLEUROTOMA USTULATA. *Pleur. testâ abbreviato-fusiformi, spiræ suturis subprofundis; anfractibus supernè canaliculatis, medio conspicuè bicarinatis, infra carinas tenuiliratis; sinu amplo; canali breviusculo; pallidè ustulatâ, anfractuum parte supremâ juxta suturam rubido-fusco maculato-tinctâ.*

THE SCORCHED PLEUROTOMA. Shell shortly fusiform, sutures of the spire rather deep; whorls canaliculated round the upper part, conspicuously two-keeled round the middle, encircled with fine ridges beneath the keels; sinus large; canal rather short; pale burnt brown, upper edge of the whorls next the suture stained with spots of reddish-brown.

Hab. —— ?

This is another new and well-defined species for which I am indebted to my esteemed friend T. L. Taylor, Esq. The three interesting new species from that gentleman's cabinet described and figured in this plate, though coming at the eleventh hour, form a most acceptable termination to this very long and tedious monograph.

PLEUROTOMA.

[*Temporary Index.*]

	Plate.	Species.
abbreviata, *Reeve*	X.	86
abyssicola, *Forbes*	XIX.	157
Ægeensis, *Forbes*	XIX.	164
ægrota, *Reeve*	XXXI.	276
æruginosa, *Reeve*	XXIX.	261
affinis, *Gray*	XXXIV.	309
alabaster, *Reeve*	VIII.	65
albibalteata, *Reeve*	X.	84
albicans, (*Clav.*) Hinds	XXVII.	243
albicostata, *Sowerby*	VIII	62
albifuniculata, *Reeve*	XXXVIII.	350
albina, *Lamarck*	IX.	77
albinodata, *Reeve*	XXXVIII.	350
amabilis, (*Clav.*) Hinds	XXXIV.	308
angicostata, *Reeve*	XXXVI.	327
angulifera, *Reeve*	XXXIX.	360
annulata, *Reeve*	V.	35.
apicata, *Gray*	XXXIII.	305
aquatilis, *Reeve*	XXI.	177
arata, *Reeve*	XXX.	267
arctata, *Reeve*	XXXII.	294
arcuata, *Reeve*	III.	15
argillacea, (*Clav.*) Hinds	XXV.	217
armillata, *Reeve*	XXI.	176
aspera (*Clav.*), Hinds	XXV.	224
astricta, *Reeve*	XII.	98
aterrima, *Sowerby*	XII.	100
attenuata, (*Murex*), Montagu	XXVIII.	248
aureola, *Reeve*	XXIV.	212
auriculifera, *Lamarck*	VIII.	69
australis, (*Murex*) Chemnitz	II.	14
axis, *Reeve*	XXXIV.	311
Babylonia, (*Murex*), Linnæus	I.	5
bætica, *Reeve*	XX.	167
Beckii, *Reeve*	II.	10
bella, (*Clav.*), Hinds	XVIII.	146
bicanalifera, *Sowerby*	XII.	103
bicolor, *Sowerby*	VI.	40
bijubata, *Reeve*	X.	87
bilineata, *Reeve*	XXV.	225
bimarginata, *Lamarck*	V.	34
Boholensis, *Reeve*	XIII.	112
borealis, *Reeve*	XXXI.	277
Bottæ, Valenciennes	IX.	76
brevicaudata, *Reeve*	XV.	126
Buccinoides, *Lamarck*	VIII.	68
cælata (*Clav.*), Hinds	XXVII.	241
Cagayanensis, *Reeve*	XXXVI.	329
callosa, *Valenciennes*	XII.	104
canaliculata, *Reeve*	XXXVIII.	348
cancellata, *Gray*	XXXV.	317
candida (*Clav.*), Hinds	XXV.	221
candidula, *Reeve*	XXXIX.	358
cantharis, *Reeve*	XXX	272
carbonaria, *Reeve*	XVII.	145
cardinalis, *Reeve*	XXX.	266
carinata, *Gray*	VII.	56
casta, (*Daphnella*), Hinds	XXXVII.	336
castanea, *Reeve*	XXII.	191
catena, *Reeve*	V.	36
cavernosa, *Reeve*	XXXIII.	303
cedo-nulli, *Reeve*	XIV.	117
cincta, *Lamarck*	XII.	99
cinerea, (*Clav.*), Hinds	XXII.	195
cingulifera, *Lamarck*	I.	1
clara, *Reeve*	XXII.	190
clathrata, *Reeve*	XXXIX.	361
clavata, *Sowerby*	XVI.	132
clavulus, *Sowerby*	XII.	106
coccinata, *Reeve*	XXXIII.	299
collaris, *Sowerby*	XV.	120
Comarmondi, Michaud	VII.	50
compta, *Reeve*	XXXII.	292
concentricostata, *Reeve*	XXXIII.	279
conica. *Enc. Méth.*	V.	31
contracta, *Reeve*	XIV.	116
cornea, *Reeve*	XXXVII.	341
cornuta, Sowerby	XII.	102
corrugata, Kiener	IX.	73
corusca, *Reeve*	X.	89
costata, *Gray*	XXXIII.	298
crassilabrum, *Reeve*	XIV.	118
crebriplicata, *Reeve*	XXXIV.	313
crenularis, *Lamarck*	VII.	54
crispa, *Lamarck*	II.	11
crispata, *Cristoforis*	XIX.	156
crocata, *Reeve*	XX.	174
cryptorraphe, *Sowerby*	I.	7
Cumingii, (*Buccinum*), Powis	XIII.	110
cuprea, *Reeve*	XVII.	140
Cycladensis, *Forbes*	XXXII.	289
dædala, *Reeve*	XXXVIII.	355
Daphnelloides, *Reeve*	XXIV.	206
debilis (*Clav.*), Hinds	XXII.	187
decussata, *Macgillivray*	XIX.	159
delicata, *Reeve*	XXXIV.	310
Delosensis, *Reeve*	XL.	365
dentifera (*Clav.*), Hinds	XXVII.	236

	Plate.	Species.
Deshayesii, *Doumet*	III.	19
diadema, *Kiener*	VI.	46
digitale, *Reeve*	XVII.	138
discors, *Sowerby*	VI.	38
donata (*Clav.*), Hinds	XXVI.	228
D'Orbignii, *Reeve*	XXXIX.	359
Dorvilliæ, *Gray*	XXVIII.	294
duplicata, *Sowerby*	IX.	78
Dysoni, *Reeve*	XXXIV.	315
ebur, *Reeve*	XXX.	275
echinata, *Lamarck*	VI.	48
efficta, *Reeve*	XXXIII.	302
ericea (*Clav.*), Hinds	XXI.	188
exarata *Reeve*	XXXIII.	201
exasperata, *Reeve*	II.	8
excentrica, *Sowerby*	VII.	58
eximia, *Reeve*	X.	82
fascialis, *Lamarck*	IV.	24
felina, *Hinds*	X.	80
fenestrata, *Reeve*	XXXV.	319
fimbriata (*Clav.*), Hinds	XXIV.	208
flammea (*Clav.*), Hinds	XXIV.	210
flavescens, *Reeve*	XXI.	178
flavidula, *Lamarck*	VIII.	66
Forbesii, *Reeve*	XXXVII.	339
foraminata, *Reeve*	XXXIII.	301
formicaria, *Sowerby*	XXVIII.	247
formosa, *Reeve*	XXXVI.	331
Forthiensis, *Reeve*	XXVIII.	246
fortis, *Forbes*	XIX.	165
foveolata, *Reeve*	XXXVII.	342
fragilis, *Reeve*	XXI.	179
fucata, *Reeve*	XX.	169
fulminata, *Kiener*	V.	37
fulva (*Clav.*), Hinds	XXVII.	273
funiculata, *Valenciennes*	XI.	95
fuscescens, *Gray*	XV.	125
Fusoides, *Reeve*	XXXVIII.	349
Garnonsii, *Reeve*	I.	4
gemmata, *Hinds*	X.	83
gibbosa, (*Murex*), Chemnitz	V.	30
glumacea (*Clav.*), Hinds	XXVII.	240
gracilenta, *Reeve*	XIV.	114
grandis, *Gray*	II.	13
granicostata, *Reeve*	XXXV.	323
granulosa, *Sowerby*	XI.	90
Grayi, *Reeve*	XXVI.	232
gravis, *Hinds*	XXIII.	202
Greenlandica, *Reeve*	XXXVII.	341
Griffithii, *Gray*	VII.	57
Guildingii, *Reeve*	XXX.	268
Harfordiana, *Reeve*	XI.	93
harpula, Valenciennes	XV.	124
harpularia, *Des Moulins*	XV.	124
hastula, *Reeve*	XVII.	139
hexagona, *Sowerby*	XII.	105
hexagonalis, *Reeve*	XXXII.	293
Hindsii, *Reeve*	XIV.	119
Hondurasensis, *Reeve*	XXXV.	318
hyalina, *Reeve*	XXX.	269
igniflua, *Reeve*	XXIV.	214
imperialis, *Lamarck*	V.	33
implicata, *Reeve*	XX.	170
impressa, (*Clav.*) Hinds	XXIII.	200
incisa, *Reeve*	XVI.	133
incrassata, *Sowerby*	IX.	76
Indica, *Deshayes*	XVII.	142
inermis, *Hinds*	VIII.	64
inflata, Cristoforis	XIV.	131
inquinata, *Reeve*	XXXI.	283
interrupta, *Lamarck*	VII.	51
interrupta, Sowerby	XII.	98
Javana. (*Murex*), Linnæus	IV.	26
jubata, *Hinds*	VII.	52
Kieneri, Doumet	VII.	56
lactea, *Reeve*	XV.	123
lanceolata, *Reeve*	XXI.	182
languida, *Reeve*	XXIX.	257
laqueata, *Reeve*	XXXIX.	280
læta, (*Clav.*), Hinds	XVIII.	155
lævigata, *Philippi*	XXXII.	291
leucostoma, *Reeve*	XXXI.	278
Leufroyi, *Michaud*	XVI.	131
linearis (*Murex*), Montagu	XXXIII.	296
lineata, *Lamarck*	XI.	96
lineolata, *Gray*	XXXVII.	337
lirata, *Reeve*	XXXI.	280
livida (*Defrancia*), Möller	XXXV.	316
Loeviana, *Forbes*	XXXII.	290
luctuosa, (*Clav.*) Hinds	XVIII.	149
luteo-fasciata, *Reeve*	XXVII.	239
lutescens, *Reeve*	XXX.	271
Lyciaca, *Forbes*	XIX.	160
Lymnææformis, *Kiener*	XXXV.	325
macrostoma, *Reeve*	XXXIX.	362
maculosa, *Sowerby*	VI.	45
major, *Gray*	VII.	59
margaritifera, *Gray*	XXXVIII.	354
marmorata, *Lamarck*	III.	21
maura, *Sowerby*	VI.	47
merita, (*Clav.*), Hinds	XVIII.	141
Metcalfiana, *Reeve*	XXVI.	229

	Plate	Species.
metula, (*Clav.*), Hinds	XXVI.	238
micans (*Clav.*), Hinds	XXVI.	227
militaris, (*Clav.*), Hinds	VII.	55
minuta, *Forbes*	XIX.	158
Mitræformis, (*Murex*), Wood	IV.	23
modesta, Sowerby	XII.	99
Mölleri, *Reeve*	XXXV.	324
monile, *Valenciennes*	XVI.	137
mucronata, *Reeve*	XXXVI.	328
multiplicata, *Reeve*	XL.	364
muricata, *Lamarck*	V.	31
mystica, *Reeve*	XII.	107
Nassoides, *Gray*	XXIX.	259
nebula (*Murex*), Montagu	XXIII.	198
neglecta, (*Clav.*), Hinds	XXV.	218
nexa, *Reeve*	XXXI.	282
nigerrima, *Sowerby*	XII.	102
nigrescens, *Gray*	XXVI.	235
nitens, (*Clav.*), Hinds	XXII.	189
nitida, *Kiener* ,	XVI.	130
nitida, Sowerby	XXXI.	194
nodifera, *Lamarck*	IV.	28
Novæ Zelandiæ, *Reeve*	XVII.	143
nux, *Reeve*	XXI.	185
obeliscus, *Reeve*	XX.	175
obesa, *Reeve*	V.	29
obesicostata, *Reeve*	XXXIX.	265
obliquata, *Reeve*	XXIX.	262
obliquicostata, *Reeve*	XX.	168
obtusa, *Reeve*	XXXVIII.	356
occata (*Clav.*), Hinds	XXIII.	197
occidentalis, *Reeve*	XXXIX.	357
olivacea, *Sowerby*	IV.	27
olyra, *Reeve*	XXIV.	207
ornata (*Daphnella*), Hinds	XXIV.	209
Owenii, *Gray*	IX.	70
opalis, *Reeve*	XXX.	274
oxytropis, *Sowerby*	III.	17
pagodus, *Reeve*	XXVII.	242
palliata, *Reeve*	XXII.	193
pallida, *Sowerby*	XVI.	134
papalis, *Reeve*	IV.	22
papillaris (*Clav.*), Hinds	XXXVII.	335
Paria, *Reeve*	XXXVI.	334
pardalis (*Clav.*), Hinds	XXIII.	196
partita, (*Conopleura*) Hinds	XXXVI.	330
patula, *Reeve*	XXIV.	215
parvula, *Reeve*	XXVIII.	254
paxillus, *Reeve*	XXXI.	285
pentagonalis, *Gray*	XXVIII.	255
pessulata, *Reeve*	XIV.	115
pellis-phocæ, *Reeve*	XXIX.	263
Perronii, (*Murex*), Chemnitz	XI.	94
Philberti, *Michaud*	XVI.	129
Philippinensis, *Reeve*	XIII.	109
pica, *Reeve*	VIII.	61
picta, *Beck*	III.	16
planilabrum, *Reeve*	X.	88
plumbea, (*Clav.*), Hinds	XVIII.	151
pluricarinata, *Reeve*	XXXII.	288
pluteata, *Reeve*	XII.	101
polita, (*Clav.*), Hinds	XVIII.	150
Polynesiensis, *Reeve*	XXXIII.	304
pseudo-carinata, *Reeve*	XXIX.	256
pudica (*Clav.*), Hinds	XXIII.	199
pulchella, *Reeve*	XXI.	180
pulchra, *Gray*	XXXVIII.	351
punctata, *Reeve*	XXI.	181
puncticincta, *Reeve*	XXIX.	258
purpurea, *De Blainville*	XVI.	136
putillus, *Reeve*	XXV.	219
pyramidata, *Valenciennes*	VI.	41
pyramidula, *Reeve*	XXIX.	260
pyramis, (*Clav.*), Hinds	XVIII.	147
quadrata, *Reeve*	XXVIII.	253
quadrifasciata, *Gray*	XXVIII.	251
quisqualis (*Clav.*), Hinds	XXVI.	230
Quoyi, *Des Moulins*	XVI.	137
radula, *Hinds*	XXV.	223
rava (*Clav.*), Hinds	XXVIII.	250
reflexa, *Reeve*	XXVIII.	252
regia, *Beck*	IX.	75
regularis, *Reeve*	XXXVI.	326
reticulata, *Bronn*	XV.	122
retusa (*Clav.*), Hinds	XXVI.	334
rigida (*Clav.*), Hinds	XXV.	216
Rissoides, *Reeve*	XIII.	111
robusta (*Clav.*), Hinds	XXIII.	204
rosacea, *Reeve*	XX.	166
rosaria, *Reeve*	XXXIV.	314
rosea, *Sowerby*	VI.	43
rosea, Quoy	XVII.	143
rubida (*Clav.*), Hinds	XXV.	220
rubiginosa (*Clav.*), Hinds	XXVI.	226
rubinicolor, *Reeve*	XXI.	184
rubricata, *Reeve*	XXXIX.	321
rubrifasciata, *Reeve*	XX.	171
rudis, *Sowerby*	VII.	53
rugifera, *Sowerby*	XV.	127
rugulatus (*Defrancia*), Möller	XXXVII.	345
rustica, *Sowerby*	XI.	91
sacerdos, *Reeve*	XX.	172

	Plate.	Species.
sacra, *Reeve*	XXI.	183
saturata, *Reeve*	XXIV.	213
scalaris (*Clav.*), Hinds	XXVI.	233
scalpta, *Reeve*	XXXVII.	338
scarabæus, *Reeve*	XXXVIII.	353
sculpta, (*Clav.*), Hinds	XVIII.	154
semen, *Reeve*	XXXVI.	333
semicostata, *Kiener*	VIII.	67
semigranosa, *Reeve*	XXXVII.	346
septangularis, (*Murex*) Montagu	XXXV.	321
sigillata, *Reeve*	XL.	363
Sinensis, (*Clav.*), Hinds	XVIII.	153
sinistralis, *Petit*	X.	81
sinuosa, *Gray*	XXXIV.	307
sordida, *Reeve*	XXXII.	286
speciosa, *Reeve*	II.	9
spectabilis, *Reeve*	I.	6
spectrum, *Reeve*	XXV.	222
spicata (*Clav.*), Hinds	XXVI.	231
spirata, *Lamarck*	VI.	44
splendidula, *Sowerby*	VIII.	60
spurca (*Clav.*), Hinds	XXXIV.	312
stolida, *Hinds*	XVIII.	152
striata, *Kiener*	XVII.	144
striolata, *Scacchi*	XXXV.	320
Stromboides, *Sowerby*	IX.	71
subula, *Reeve*	XXIV.	211
suturalis, *Bronn*	VII	50
symmetrica, *Reeve*	XXXVII.	340
taxus, (*Murex*), Chemnitz	IV.	25
Tayloriana, *Reeve*	XL.	366
tenuis, *Gray*	IX.	73
teres, *Forbes*	XIX.	161
tessellata (*Clav.*), Hinds	XXVII.	244
Ticaonica, *Reeve*	XXX.	270
tigrina, *Lamarck*	I.	3
tincta, *Reeve*	XXXVIII.	347
tricarinata, *Valenciennes*	XV.	121
trifasciata, *Gray*	XXXIII.	297
triticea, *Kiener*	XVI.	128
Tritonoides, *Reeve*	X.	85
tuberculata, *Gray*	IX.	72
tuberculifera, *Broderip*	VIII.	63
Turbinelloides, *Reeve*	XXXIX.	265
turgida, *Forbes*	XIX.	163
turricula, Sowerby	VI.	49
turricula (*Murex*), Montagu	XIX.	162
turris, *Reeve*	XXXVII.	344
umbilicata, (*Drillia.*), Gray	XI.	97
undaticostata, *Reeve*	XXXI.	284
undosa, *Lamarck*	III.	18
unedo, *Valenciennes*	II.	12
unicolor, *Sowerby*	XI.	92
unimaculata, *Sowerby*	VI.	42
unizonalis, *Lamarck*	XIII.	113
urnula, *Reeve*	XXVII.	245
ustulata, *Reeve*	XL.	367
Vahlii, (*Defrancia*), Moller	XXXVI.	332
varicosa, *Reeve*	XVII.	141
variculosa, *Sowerby*	XXII.	194
variegata, *Kiener*	I.	2
variegata, Philippi	XVI.	129
Vauquelini, *Payrandeau*	XIII.	108
vexillum, *Reeve*	XXIX.	264
venusta, *Reeve*	IX.	79
vidua, *Reeve*	XXII.	192
violacea, *Hinds*	XXII.	186
virginea, *Beck*	V.	32
virgo, *Lamarck*	III.	20
viridula (*Defrancia*), Möller	XXXIV.	306
vitrea, *Reeve*	XXXIII.	300
vittata, *Reeve*	XXIII.	205
vultuosa, *Reeve*	XXX.	273
Woodii, Kiener	I.	7
zebra, (*Buccinum*), Lamarck	XVI.	135
zonata, *Gray*	IX.	74
zonulata, *Reeve*	VI.	39

ERRATA.

Species 17. *P. oxytropis*—add as synonyme, *P. nobilis*, Hinds.
Species 27. *P. olivacea*—Erase *P. funiculata*, Valenciennes, as synonyme, and refer for that species to Plate XI. Sp. 95.
Species 49. For *P. turricula*, Sowerby—read *P. Sowerbyi*, Reeve; and for *P. turricula*, refer to Species 162.
Species 73. *P. tenuis*—add as synonyme, *P. undatiruga*, Philippi.
Species 91. *P. rustica*, Sowerby—add as synonyme, *P. tiarella*, Valenciennes.
Species 133. For *P. incisa*, Reeve,—read *P. Maravignæ*, Bivona, and add as synonyme, *Clavatula crebricostata*, Hinds.
Species 271. For *P. fulva*—read *P. lutescens*.
Species 277. For *P. scalaris*—read *P. borealis*.
Species 331. For *P. tessellata*—read *P. formosa*.
Species 344. For *P. pagoda*—read *P. turris*.
Plate XIII. Sp. 205. For *tuberculos*—read *tubercula*.
Plate XXXI. For Sp. 280—read Sp. 281.
Plate XXXIII. For Sp. 171—read Sp. 305.
Plate XXXIV. For Sp. 315—read Sp. 314.

MONOGRAPH

OF THE GENUS

CRASSATELLA.

"In contemplation of created things
By steps we may ascend to God."—*Milton.*

1a.

2a.

1b

2b

3

4

5

CRASSATELLA.

PLATE I.

Genus CRASSATELLA, Lamarck.

Testa æquivalvis, transversa, inæquilateralis, undique clausa. Cardo in valvâ alterâ dentibus duobus; in alterâ dente unico; foveolâ in utrâque valvâ anticè adjectâ, ligamento profundè inserto. Dentes laterales nulli, aut obsoleti. Impressiones musculares distinctissimè imbutæ.

Shell equivalve, transverse, inequilateral, and everywhere closely shut. Two cardinal teeth in one valve and one in the other, with a deep pit on the anterior side in each for the reception of the ligament. Lateral teeth obsolete, or wanting. Impressions of the two lateral muscles very distinctly marked.

The genus Crassatella was instituted by Lamarck for the purpose of associating a group of acephalous mollusks that appear to have been quite unknown to Linnæus. Their shells exhibit an interesting peculiarity of character, being of a thick and solid nature, with an internal ligament, and for the most part covered with a strong brown epidermis. The genus, however, as introduced by this distinguished conchologist, was yet imperfect; it included five species that could not easily be separated from his *Amphidesmata*, and was therefore susceptible of improvement. With the view of uniting the intermediate species of these genera, a new genus was very judiciously proposed by Deshayes, under the title of *Mesodesma*; and, as it thus includes a series which are not strictly referable to either, it is now commonly adopted.

Out of eleven species referred to this genus by Lamarck, six only can be allowed to remain. Since his time, however, we have had many important additions; two new species were described by Sowerby, in the 'Proceedings of the Zoological Society' for 1832; one by the same author, in his 'Appendix to the Tankerville Catalogue;' and ten by myself, in the 'Proceedings of the Zoological Society' for the past year.

Of the following nineteen species, *eleven* have never been figured before.

Species 1, *a* and *b*. (Mus. Cuming.)

CRASSATELLA GIBBOSA. *Crass. testâ subovali, gibbosâ, epidermide nigerrimo-fuscâ indutâ; intùs albicante, latere postico brunneo; umbonibus undulatis, compressis; latere antico inclinato, rotundato, sulcis nonnullis brevibus; postico arcuato, subrostrato.*

THE SWOLLEN CRASSATELLA. Shell nearly oval, gibbous, and covered with a very dark brown epidermis; interior whitish, brown at the posterior end; umbones waved and peculiarly compressed; anterior side bent, rounded, and ornamented with a few short grooves; posterior side curved, and somewhat beaked.

SOWERBY, Proceedings Zool. Soc., 1832, p. 56.
REEVE, Conch. Syst., vol. i. pl. 44. f. 2.
Hab. Western Coast of South America.

Several specimens of this interesting species were dredged up by Mr. Cuming from sandy mud in eleven fathoms water, off St. Elena and Xipixapi, in South America. The specimens here figured are the oldest and the youngest which Mr. Cuming collected, and are admirably adapted to show the different appearances this shell exhibits at different periods of growth. At an early stage the valves are depressed and strongly undulated; they then become gradually gibbous, and the undulations, retaining their original formation, get pressed up to the umbones.

Species 2, *a* and *b*. (Mus. Cuming.)

CRASSATELLA UNDULATA. *Crass. testâ ovali, brunneâ, fusco-maculatâ, epidermide rubido-fuscâ indutâ; intùs brunneâ, prope marginem anticam albicante; umbonibus undulatis; latere antico inclinato, rotundato; postico longiore, angulifero.*

THE WAVED CRASSATELLA. Shell oval, brown, faintly spotted, and covered with a reddish brown epidermis; interior bright transparent reddish brown, white near the anterior margin; umbones strongly undulated; anterior side bent and rounded; posterior side longer, and angulated.

SOWERBY, Proceedings Zool. Soc., 1832, p. 56.
Hab. Puerto Portrero, Central America.

This species was dredged by Mr. Cuming off the above-mentioned coast, from sandy mud in eleven fathoms water. The observations that were made on the different appearances of the *Crassatella gibbosa*, at different periods of growth, apply also to the Crassatella undulata; the undulations are, however, wider and much more strongly developed. The epidermis of this shell is of a reddish brown colour, and (in the adult) of very thick fibrous texture.

Species 3. (Mus. Stainforth.)

Crassatella castanea. *Crass. testâ ovato-trigonâ, gibbosâ, umbonibus planè erosis, epidermide castaneâ, quasi politâ, nitente, indutâ; intùs subfuscâ; latere antico rotundato; postico angulifero, abrupto.*

The chestnut Crassatella. Shell ovately triangular, smoothly eroded at the umbones, and covered elsewhere with a bright chestnut-coloured epidermis, as smooth and shining as if it were polished; interior rather tinged with a dark fleshy brown; the anterior side rounded; the posterior somewhat angular and abrupt.

Reeve, Proceedings Zool. Soc., 1842, p. 42.

Hab. Coast of New Holland.

The Crassatella castanea, the largest of the genus, is singularly distinguished by a smooth erosion of the umbones; the bright horny nature of the epidermis is also a characteristic feature. I only know of three specimens of this fine shell, which, like most of the productions of New Holland, exhibit a very marked peculiarity of character.

Species 4. (Mus. Stainforth.)

Crassatella decipiens. *Crass. testâ ovatâ, subgibbâ, epidermide fuscâ partim indutâ, vividè radiatâ, radiis ab umbonibus ad margines sæpè extensis; latere antico subangulato, striis brevibus ornato; postico subquadrato, parùm productiore.*

The deceptive Crassatella. Shell ovate, slightly gibbous, partially covered with a brown epidermis, and vividly rayed, the rays, in most instances, extending from the umbones to the outer margins; anterior side rather angular, and ornamented with short striæ; posterior side somewhat square, and but slightly produced.

Reeve, Proceedings Zool. Soc., 1842, p. 42.

Hab. Coast of New Holland.

This species, which has arrived in great abundance from New Holland, has been received by most collectors as the *Crassatella Kingicola*; I moreover regret that it has been figured under that title in my 'Conch. Syst.' This error was kindly pointed out to me by Mr. Sowerby. The *Crassatella Kingicola*, which I had not previously seen, is a very distinct species, and one of extreme rarity; indeed, the specimen which has furnished me with the following description is the only one I have seen.

Species 5. (Mus. Stainforth.)

Crassatella Kingicola. *Crass. testâ solidâ, ovato-orbiculatâ, vix gibbâ, subdepressâ, albido-flavescente, epidermide flavido-fuscâ indutâ; umbonibus valdiusculè plicatis, pallidè roseis; latere antico rotundato; postico leviter angulato.*

The King Island Crassatella. Shell solid, ovately orbicular, very little gibbous, rather depressed, of a pale yellow colour, covered with a yellowish brown epidermis; umbones rather strongly plaited, and palely tinged with rose-colour; anterior side rounded; posterior slightly angulated.

Lamarck, Anim. sans vert. (Deshayes' edit.), vol. vi. p. 109.

Deshayes, Enc. Méth., vers, vol. ii. p. 20.

Sowerby, Genera of Shells, No. 3. pl. 2.

Hab. King Island, New Holland.

This interesting shell may be easily recognized by its rosy-tinted umbones, which are, moreover, rather strongly plaited. The specimen before me, belonging to the Rev. Mr. Stainforth, is, I believe, the only one in this country. M. Deshayes, however, says, in the 'Encyclopédie Méthodique,' that he has a large specimen in his possession; and Mr. Cuming informs me that he has lately seen one at Hamburgh.

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6 b.

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CRASSATELLA.

PLATE II.

Species 6. (Fig. *a*, Mus. Cuming; Fig. *b*, Mus. Stainforth.)

CRASSATELLA SULCATA. *Crass. testâ ovato-trigonâ, valdè inæquilaterâ, gibbâ, transversim sulcato-plicatâ; latere antico rotundato, postico angulato, productiore.*

THE GROOVED CRASSATELLA. Shell ovately triangular, very inequilateral, gibbous, transversely plaited and grooved; anterior side rounded, posterior angular, and more produced.

LAMARCK, Anim. sans vert. (Deshayes' edit.), vol. vi. p. 110.

Hab. Coast of New Holland.

The shell which I assign to this species is generally understood to be the Crassatella sulcata of Lamarck, and it is much to be regretted that M. Chenu has omitted to publish it in Delessert's 'Recueil de Coquilles.' De Blainville and Deshayes both attribute to this species the shell which I have figured under the title of *Crassatella pulchra* (vide pl. 3. f. 16.), but it does not agree so well with Lamarck's description.

Species 7. (Mus. Cuming.)

CRASSATELLA LAPIDEA. *Crass. testâ ovato-orbiculatâ, epidermide fibrosâ sparsim indutâ; umbonibus parvis, striatis; intùs subfuscâ; latere antico rotundato, abrupto, striis nonnullis brevibus ornato; postico subangulato.*

THE STONY CRASSATELLA. Shell ovately orbicular, covered with a scattered fibrous epidermis; umbones small and striated; interior brownish; anterior side rounded; posterior somewhat angular.

REEVE, Proceedings Zool. Soc., 1842, p. 43.

Hab. Island of Negros, one of the Philippines.

A single pair and several odd valves of this shell were dredged by Mr. Cuming from coarse sand in seven fathoms water at the Island of Negros. The heavy stony nature of the shell has suggested the above name.

Species 8. (Mus. Cuming.)

CRASSATELLA ANTILLARUM. *Crass. testâ trigono-ovatâ, vix gibbosâ, crassâ, epidermide fibrosâ indutâ; intùs brunneâ, prope marginem albicante; umbonibus subdepressis, leviter undulatis; latere antico rotundato, postico subangulato.*

THE CRASSATELLA OF THE WEST INDIES. Shell triangularly ovate, slightly gibbous, thick, and covered with a strong fibrous epidermis; interior deep chocolate-brown, white near the margin; umbones a little depressed, and faintly undulated; anterior side rounded, posterior rather angular.

REEVE, Proceedings Zool. Soc., 1842, p. 44.

Hab. Island of Margaritta, West Indies.

This magnificent shell, which Mr. Cuming informs me was dredged at the Island of Margaritta, in the pearl fisheries, has the same rich chocolate-coloured interior as the *Crassatella undulata*, and it approaches nearer in most respects to that species than any other. It is almost a matter of surprise that the Crassatella Antillarum should be one of such extreme rarity; the beautiful shell, however, which M. Chenu has erroneously figured as an example of the *Crassatella rostrata*, may probably be another variety of it.

Species 9. (Mus. Stainforth.)

CRASSATELLA CORBULOIDES. *Crass. testâ suborbiculatâ, valdè gibbosâ, umbones versus profundè sulcatâ, epidermide fuscâ indutâ; latere antico rotundato, postico producto, subitò rostrato.*

THE CORBULA-SHAPED CRASSATELLA. Shell somewhat orbicular, very gibbous, deeply grooved towards the umbones, and covered with a brown epidermis; anterior side rounded, posterior produced, suddenly beaked.

REEVE, Proceedings Zool. Soc., 1842, p. 45.

Hab. ——— ?

The shell which I have here described and figured under the above title is assuredly distinct from any other species. Its short gibbous form reminds us somewhat of the *Crassatella gibbosa*, but the umbones are not depressed as in that species, and the shell differs as materially in other respects.

Species 10. (Mus. Stainforth.)

CRASSATELLA ROSTRATA. *Crass. testâ ovato-trigonâ, rostratâ, lævigatâ, lineis rectis numerosis, ad margines ab umbonibus divergentibus, per totam superficiem ornatâ; epidermide brunneâ, tenui, politâ, indutâ; latere antico rotundato, postico productiore, subangulato; intùs albicante, margine crenulato.*

The beaked Crassatella. Shell ovately triangular, beaked, smooth, having the entire surface ornamented with a number of straight lines diverging from the umbones to the margins, and covered over with a thin brown polished epidermis; anterior side rounded, posterior more produced and somewhat angular; interior whitish, and strongly crenulated round the edge.

Lamarck, Anim. sans vert. (Deshayes' edit.), vol. vi. p. 110. Encyclopédie Méthodique, pl. 253. f. 2. *a*, *b*.
Sowerby, Genera of Shells, No. 3. pl. 1. f. 3.
Hab. Island of Ceylon.

The Crassatella rostrata is a very characteristic species, and the only large one of the genus that is crenulated round the inner margin. The shell figured by Chenu under this title in Delessert's 'Recueil de Coquilles' may probably be a variety of the *Crassatella Antillarum*. Lamarck quotes South America and the West Indies as habitats of this species; I never, however, heard of this shell coming from either of those localities, having received it, on the contrary, from Ceylon.

Species 11. (Mus. Cuming.)

Crassatella jubar. *Crass. testâ subovatâ, valdè inæquilaterâ, gibbosâ, extùs vividè radiatâ, radiis ferruginosis, ab umbonibus, jubarum similitudine, divergentibus; ad utrumque latus irregulariter multistriatâ; epidermide fuscâ, subquassâ, sparsim indutâ; intùs albâ, ad extremitatem posticam brunneâ; umbonibus plicatis, compressis; latere antico inclinato, rotundato, postico arcuato, elongato, acuminato.*

The sunbeam Crassatella. Shell nearly ovate, very inequilateral, gibbous, and vividly radiated, the rays of a ferruginous brown colour, diverging from the umbones like sunbeams; transversely striated in a very irregular manner on each side, and covered here and there with a dark bruised epidermis; interior white, brown towards the posterior extremity; umbones plaited and compressed; anterior side bent and rounded, posterior curved, elongated, and pointed.

Reeve, Proceedings Zool. Soc., 1842, p. 44.
Hab. Western coast of New Holland.

A single specimen of this fine shell was presented to Mr. Cuming a short time since in Hamburgh, having been received by the liberal donor of it from that prolific portion of the globe above noted. It exhibits a peculiarity of character very unlike any other species, and is so richly illumined with rays, that I have distinguished it by the name of "*The sunbeam Crassatella.*"

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Sowerby del.

Reeve lith.

CRASSATELLA.

PLATE III.

Species 12. (Mus. Cuming.)

CRASSATELLA RADIATA. *Crass. testâ arcuatâ, valdè inæquilaterâ, rostratâ, carinatâ; superficie totaliter sulcatâ, sulcis latis, profundis; vividè radiatâ, radiis ab umbonibus divergentibus; latere antico rotundato, postico productissimo, acuminato.*

THE RADIATED CRASSATELLA. Shell curved, very inequilateral, beaked, and carinated; surface wholly grooved, the grooves, which run transversely, being broad and deep; vividly radiated, rays diverging from the umbones; anterior side rounded, posterior very much produced and pointed.

SOWERBY, Appendix Tank. Cat., p. ii.

REEVE, Conch. Syst., vol. ii. pl. 44. f. 1.

Hab. Island of Singapore.

Several specimens of this very interesting little shell, together with the soft parts, were brought home by Mr. Cuming from the island of Singapore, where he dredged them from coarse sand in seven fathoms water.

Species 13. (Mus. Cuming.)

CRASSATELLA ZICZAC. *Crass. testâ subtrigonâ, depressâ, luteolâ, epidermide tenui indutâ; radiis binis interruptis, ab umbonibus ad margines divergentibus, lineis roseis, flexuosis, ubique pictâ; intùs subrosaceâ; latere antico breviculo, rotundato; postico subangulato; lunulâ utrinque radiis roseis vividè virgatâ.*

THE ZIGZAG-MARKED CRASSATELLA. Shell somewhat triangular, depressed, yellowish, and covered with a thin epidermis; the surface of each valve painted with a pair of interrupted rose-coloured rays, surrounded with a number of zigzag lines; interior rose-tinted; anterior side short and rounded; posterior rather angular; lunule vividly striped on both sides with rose-coloured rays, running transversely.

REEVE, Proceedings Zool. Soc., 1842, p. 45.

Hab. Island of Corrigidor, Philippines.

Several specimens of this very pretty species, in different stages of growth, were dredged by Mr. Cuming at the island of Corrigidor from coarse sand in six fathoms water.

Species 14. (Mus. Saul.)

CRASSATELLA TRIQUETRA. *Crass. testâ trigonâ, solidâ, rosaceâ, epidermide tenui indutâ, transversim striatâ; maculis roseis irregularibus vividè pictâ; intùs rosâceâ, versùs marginem albicante; margine tenuiter crenulato; lateribus subrectis, vix rotundatis; lunulâ utrinque magnâ, radiis roseis vividè virgatâ.*

THE THREE-CORNERED CRASSATELLA. Shell triangular, solid, pink, and covered with a thin epidermis; transversely striated, and vividly painted with a number of irregularly pointed pink spots or blotches; interior pinkish, white towards the margin; margin slightly crenulated, sides nearly straight, scarcely rounded; lunule on both sides the hinge large, and vividly painted with pink rays running transversely.

REEVE, Proceedings Zool. Soc., 1842, p. 46.

Hab. ——?

Several specimens of this pretty little shell have lately made their appearance, but I cannot learn from whence. Its solid triangular form and bright warm rose-colour are peculiar and distinct features.

Species 15. (Fig. *a* and *b*, Mus. Stainforth.)

CRASSATELLA SUBRADIATA. *Crass. testâ trigono-ovatâ, subæquilaterâ, transversè sulcatâ, griseo-fulvâ, radiis albis interruptis, obsoletis, maculis cuspidiformibus profusè ornatâ; lateribus ambobus rotundatis.*

THE FAINTLY-RADIATED CRASSATELLA. Shell triangularly ovate, nearly equilateral, transversely sulcated, of a dingy yellow colour, profusely ornamented with faint white rays and a number of dark arrow-headed spots; both sides of the shell rounded.

LAMARCK, Anim. sans vert. (Deshayes' edit.), vol. vi. p. 111.

Hab. South Seas, Lamarck.

There is little doubt but that the shell I have here figured is the Crassatella subradiata of Lamarck. Unfortunately he refers to no figure beyond remarking that it has somewhat the aspect of the *Mactra striata* of Chemnitz, vol. vi. pl. 22. f. 222. (*Mesodesma striata*, Deshayes).

Species 16. (Mus. Cuming.)

Crassatella pulchra. *Crass. testâ ovato-trigonâ, depressâ, obsoletè radiatâ, epidermide crassâ, fibrosâ, molliusculâ, indutâ; transversim sulcatâ, sulcis profundis, regularibus; latere antico rotundato, postico subangulato.*

The beautiful Crassatella. Shell ovately triangular, depressed, very faintly rayed, and covered with a thick, soft, fibrous, light brown epidermis; transversely grooved, grooves deep and regular; anterior side rounded, posterior nearly angular.

Reeve, Proceedings Zool. Soc., 1842, p. 43.

Crassatella sulcata, De Blainville, Malac., pl. 73. f. 4.

Hab. Coast of New Holland.

De Blainville appears to have figured this shell in his 'Manuel de Malacologie' as the *Crassatella sulcata* of Lamarck, and Deshayes refers to it as such in his new edition of the 'Histoire des Animaux sans vertèbres;' it is not, however, of the same form as the shell described by Lamarck under that title, being neither *gibbâ* nor *latere postico productiore*, nor does it agree with the figure in the 'Encyclopédie Méthodique,' to which De Blainville refers. In the shell I have fixed upon as *Crassatella sulcata* the grooves are narrow and not parallel with the lines of growth; in this shell the grooves are broad and deep, and exactly parallel with the same.

Species 17. (Mus. Saul.)

Crassatella ornata. *Crass. testâ trigonâ, subdepressâ, pallidâ, lineis spadiceis brevibus, longitudinalibus, variè pictâ, transversim striatâ; intùs albâque brunneâ, margine tenuiter crenulato; latere antico rotundato, postico flexuoso, angulato.*

The ornamented Crassatella. Shell triangular, somewhat depressed, transversely striated, of a pale brown colour, variously painted with sharp, reddish angular lines; interior white, very dark chocolate-brown under the hinge and along the posterior side; margin faintly crenulated; anterior side rounded, posterior flexuous and angular.

Reeve, Proceedings Zool. Soc., 1842, p. 46.

Mesodesma ornata? Gray.

Hab. ——?

This shell approaches so near in its characters and general resemblance to a figure in Griffith's 'Cuvier's Animal Kingdom,' pl. 22. f. 6, under the title of *Mesodesma ornata*, that we venture to consider it the same, though certainly not referable to that excellent genus.

Species 18. (Mus. Saul.)

Crassatella divaricata. *Crass. testâ orbiculari-ovatâ, fulvo-rubescente, maculis angularibus spadiceis, plus minusve connexis, vividè variegatâ; bifariam striatâ, striis anticè transversalibus, posticè obliquis; intùs albicante prope marginem violaceâ; lateribus ambobus rotundatis, margine crenulato.*

The contrarily striated Crassatella. Shell orbicularly ovate, and of a yellowish brown colour, vividly variegated with rich dark angular spots, more or less connected with each other and passing over each valve in irregular festoons; striated in two different directions, striæ on the anterior half of the shell transverse, on the posterior half oblique; interior white, violet colour near the margin; both sides of the shell rounded; margin crenulated.

D'Orbigny, Moll. des Iles Canaries, p. 106.

Venus divaricata, Chemnitz.

Venus contraria, Gmelin.

Crassatella contraria, Lamarck.

Hab. Coast of Guinea, Lamarck; Lancerotte, Canary Islands, D'Orbigny.

The Crassatella divaricata is a very characteristic species, and may be readily distinguished by the peculiar manner in which it is striated; the striæ over one half of the shell running transversely, and over the other obliquely.

Species 19. (Mus. Saul.)

Crassatella Donacina. *Crass. testâ ovato-trigonâ, subgibbâ, epidermide tenui indutâ, paululum radiatâ, umbonibus plicato-rugosis; latere antico subangulato, plicis brevibus ornato, postico subquadrato.*

The Donax-shaped Crassatella. Shell ovately triangular, rather gibbous, covered with a thin epidermis and slightly radiated; umbones strongly plaited; anterior side rather angular and adorned with short plaits, which are continued across the shell on approaching the umbones, posterior side somewhat square.

Lamarck, Anim. sans vert. (Deshayes' edit.), vol. vi. p. 110.

Hab. Coast of New Holland.

The shell which I have figured in illustration of this species appears to be the variety which Lamarck notices as having the umbones strongly plaited.

MONOGRAPH

OF THE GENUS

PHORUS.

"Eccentric, intervolved, yet regular,
Then most when most irregular they seem."—*Milton.*

1

2

3 a

3 b

LIBRARY OF THE BOMBAY BRANCH OF THE ASIATIC SOCIETY

Sowerby del.

Reeve lith.

PHORUS.

PLATE I.

Genus PHORUS, De Montford.

Testa orbicularis, subconica, spirâ obtusâ, anfractibus regularibus, peripheriâ tubulis cavis interdum ornatâ, conchyliorum lapidumque frustis, irregulariter agglutinatis; facie infernâ concaviusculâ, granosâ aut lamellosâ; umbilico amplo, profundo, sæpè ætate occultato; aperturâ depressâ, marginibus disjunctis, labro simplici, acuto. Operculum corneum, tenue, ovale.

Shell orbicular, rather conical; spire obtuse, whorls regular, periphery sometimes ornamented with hollow spines, with fragments of shells and stones irregularly agglutinated to it; under surface rather concave, granular or lamellated; umbilicus large and deep, often concealed with age; aperture depressed, margins disjoined, lip simple and acute. Operculum horny, thin and oval.

The genus *Phorus* was introduced many years since by De Montford; but as it was not recognized by Lamarck, few authors thought it worthy of adoption. Little enough is known of the nature or anatomy of the *Phori*, but the remarkable character which their shells exhibit may be sufficiently estimated to rest their claim upon that alone to the rank of a genus.

The character here alluded to is a property which these mollusks possess of agglutinating to the outer surface of their shells any fragments of stones, shells, corals, or other marine debris that they may chance to be in contact with, and which become so firmly attached that they cannot be dislodged without violence. The well-known Carrier Trochus (*Trochus agglutinans*, Lamarck; *Phorus onustus*, mihi) was for a long time the only species of *Phorus* known; when others even were discovered they were only regarded as varieties of that species, and the agglutinating property which they showed their animal occupants to possess, was not considered to be of any generic importance. The distinction however which De Montford assigned to these shells has become of infinite value, for we now possess several species of them, and the agglutinating power operates in different ways in each; some shells, for example, are found with only a few small pebbles agglutinated to the earlier whorls, whilst others are characterized by their having only such fragments of shells or stones as are flat or tile-shaped collected round the edge or periphery of the whorls; and these several methods of agglutinating are each confined to particular species. Other modifications of this property may yet be discovered, and I trust, as the *Phori* are not uncommon in the West Indies, that they will ere long be made the subject of anatomical examination. The specific differences consist, not in the nature of the materials which are agglutinated, as supposed by Born and others, who had their *Trochi lithophorus* and *conchyliophorus*, for stones, shells and corals may often be found collected on the same individual; but in the perpetuated variations of the living shell.

I see no reason at present for altering the situation which is commonly assigned to these mollusks in the general system; the structure and formation of the shell, as well as the presence of an operculum, seeming sufficiently to indicate that they are allied to the *Trochi*, and not to the *Calyptrææ* as supposed by Gray.

Species 1. (Mus. Stainforth.)

PHORUS CALCULIFERUS. *Phor. testâ orbiculari, convexo-conicâ, luteo-rosaceâ, tenui, subtilissimè granosâ et striatâ, volutis calculis et conchyliorum frustis minutis supernè symmetricè ornatis; facie infernâ profusè granosâ et striatâ.*

THE PEBBLE-COLLECTING PHORUS. Shell orbicular, convexly conical, yellowish rose-colour, thin, very finely granulated and striated, whorls symmetrically ornamented round the upper part with pebbles and minute fragments of shells; under surface profusely granulated and striated.

REEVE, Pro. Zool. Soc., 1842; Conch. Syst., vol. ii. pl. 215. f. 7.

Hab. —— ?

I have seen several specimens of this very pretty species; the shell is of a bright subrosaceous fawn-colour, entirely covered with fine diagonal striæ and cross grains. The agglutinating property being confined to the upper portion of the whorls, there is always a row of fine pebbles or shells around the sutures, and they exhibit a regular increase in their selection as the agglutinating surface increases with the growth of the shell.

Species 2. (Mus. Stainforth.)

PHORUS INDICUS. *Phor. testâ orbiculari, convexo-conicâ,*

ad apicem acutâ, tenuissimâ, subtilissimè striatâ, albâ, supernè roseâ; anfractuum peripheriâ dilatatâ, acutissimâ; infernâ facie profundè umbilicatâ, fusco-fasciatâ; lamellâ laterali cavitatem formante.

The Indian Phorus. Shell orbicular, convex, sharp at the apex, very thin, very finely striated; white, rose-tinted towards the upper part; periphery of the whorls dilated, very acute; under surface deeply umbilicated, brown-banded, lateral fold forming a cavity.

Reeve, Pro. Zool. Soc., 1842; Conch. Syst., vol. ii. pl. 215. f. 6.

Trochus Indicus, Gmelin, Lamarck; Schubert and Wagner, Supp. to Chemnitz, p. 129. pl. 229. f. 4062 *a*, *b*.

Hab. Cochin China.

I never remember having seen this shell with any shells or pebbles attached to it, but the first two or three whorls sufficiently indicate that some have been agglutinated to it at one time or another by the numerous indentations which they exhibit. The under surface of the shell is generally marked with a circular brown band, the centre being widely umbilicated.

Species 3. (Fig. *a* and *b*, Mus. Walton.)

Phorus onustus. *Phor. testâ orbiculari, conoideâ, brunnescente-albâ, striatâ; anfractibus subangulatis, rudibus vel conchyliis, vel lapidibus agglutinatis; infernâ facie subconcavâ; umbilico ætate occultato.*

The heavy-laden Phorus. Shell orbicular, conoidal, brownish white, striated; whorls somewhat angular, rude, with shells or stones agglutinated to them; under surface rather concave; umbilicus concealed in adult specimens.

Reeve, Pro. Zool. Soc., 1842; Conch. Syst., vol. ii. pl. 214. f. 3. and pl. 215. f. 8.

Trochus agglutinans, Lamarck.

Fig. *a*. *Trochus conchyliophorus*, Born.

Fig. *b*. *Trochus lithophorus*, nonnul.

Hab. West Indies.

This is the original and best-known species of the group, and is generally very heavily laden with shells, stones, &c.

Species 4. (Mus. Cuming.)

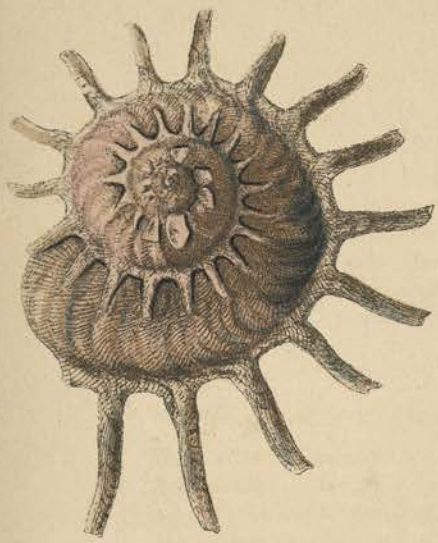
Phorus pallidulus. *Phor. testâ solidâ, pallidulâ, acutissimè pyramidali; volutis angulatis, conchyliorum frustis sparsis agglutinatis; infernâ facie leviter concavâ, subtilissimè striatâ.*

The pale Phorus. Shell solid, rather pale-looking, very sharply pyramidal; whorls angular, with scattered fragments of shells agglutinated to them; under surface slightly concave, very finely striated.

Reeve, Pro. Zool. Soc., 1842; Conch. Syst., vol. ii. pl. 214. f. 4.

Hab. Coast of Japan; Siebald.

The shells of this species have a singular pallid appearance, though fresh as when taken alive, and the fragments of shells agglutinated to them are unusually broken.



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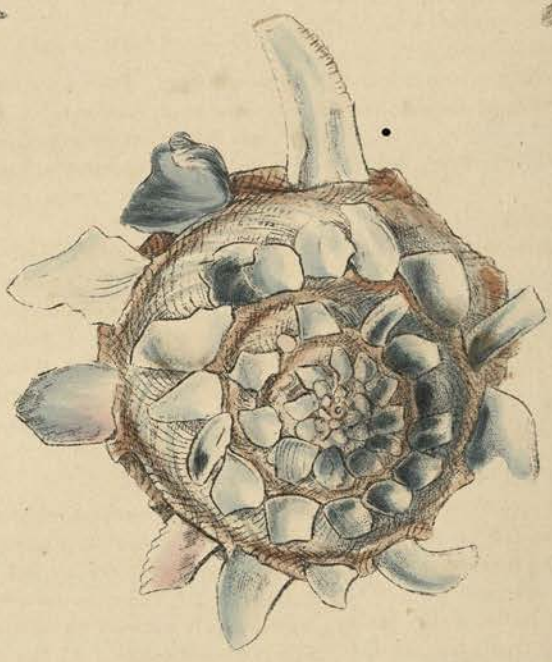

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7a

7b

Sowerby del.

Reeve lith.

PHORUS.

PLATE II.

Species 5. (Fig. *a* and *b*, Mus. Stainforth.)

PHORUS SOLARIS. *Phor. testâ orbiculari, depresso-conicâ, calculis paucis sparsis versus apicem agglutinatis; apice acuto; superficie striis obliquis et undulatis inscriptâ; anfractibus tubuloso-radiatis, tubulis tenuibus, cavis, apertis; infernâ facie plano-concavâ, undulatim striatâ; aperturâ semicordatâ; umbilico parvo.*

THE SUN PHORUS. Shell orbicular, depressly conical, with a few scattered pebbles agglutinated towards the apex; apex acute; surface inscribed with oblique and waved striæ; whorls radiated with open spouted tubes; under surface flatly concave, undulately striated; aperture semi-heart-shaped; umbilicus small.

REEVE, Pro. Zool. Soc., 1842; Conch. Syst., vol. ii. pl. 214. f. 1 and 2.

Trochus solaris, Linnæus, Lamarck.

Hab. Malacca (found in coarse sand at the depth of seven fathoms); Cuming.

This very beautiful shell, in which the periphery is more or less extended throughout into hollow spouted tubes, has never more than a few pebbles agglutinated to the first one or two whorls.

Species 6. (Mus. Stainforth.)

PHORUS CORRUGATUS. *Phor. testâ orbiculari, obeso-conicâ, albâ, diagonaliter corrugatâ, volutûm peripheriâ conchyliorum lapidumque frustis planis ornatâ; facie infernâ pallidâ, leviter granosâ et striatâ.*

THE WRINKLED PHORUS. Shell orbicular, stoutly conical, white, diagonally wrinkled, periphery of the whorls ornamented with flat pieces of shells and stones; under surface pale, lightly granulated and striated.

REEVE, Pro. Zool. Soc., 1842; Conch. Syst., vol. ii. pl. 214. f. 5.

Hab. —— ?

The disposition of the agglutinated fragments in this species is very peculiar and distinct from that in any other; the generic property being confined to the base of the whorls, they become inserted edge-wise, ranging with great regularity side by side.

Species 7. (Fig. *a* and *b*, Mus. Stainforth.)

PHORUS EXUTUS. *Phor. testâ orbiculari, depresso-conicâ, apice acuto, rosaceo-fulvâ, tenuissimâ, volutûm peripheriâ inconcinniter undulatâ, dilatatâ; superficie diagonaliter striatâ et sulcatâ; infernâ facie pallidâ, nitente, striatâ, versus marginem granosâ, lamellâ cavitatem formante.*

THE DIVESTED PHORUS. Shell orbicular, depressly conical; apex acute, rosaceous yellow, very thin; periphery of the whorls inelegantly undulated, dilated; surface diagonally striated and grooved; under surface pale, shining, striated, granulated towards the margin, the fold forming a kind of cavity.

REEVE, Pro. Zool. Soc., 1842; Conch. Syst., vol. ii. pl. 215. f. 9 and 10.

Hab. China.

This shell exhibits very slight evidence of ever having had any matter agglutinated to it. It somewhat resembles the *Phorus Indicus*, but may be readily distinguished by the elaborate manner in which the whorls are diagonally carved with grooves and striæ. The periphery of each volution, which is most unusually dilated, is exceeding thin and fragile, and very unevenly undulated.

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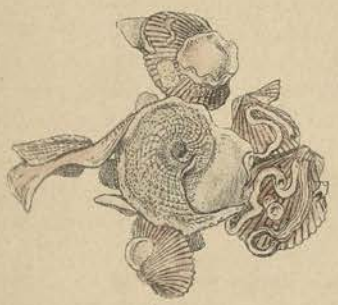

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Sowerby del sculp. et lith.

Reeve Brothers cupro-lith.

PHORUS.

PLATE III.

Species 3. (Fig. *c* and *d*, Mus. Marquis of Northampton.)

PHORUS ONUSTUS—Having two interesting new *Phori* to add to my monograph of that genus, published in March 1843, I take the opportunity of figuring a curious example of the above-named species, which has been kindly handed to me for illustration by the Marquis of Northampton, in whose collection it forms a distinguished ornament. The peculiarity of this shell consists in its being crowded with a particular species of *Cerithium*, amongst a mass of dead specimens of which, the animal must have located itself on the shore. For the specific characters, locality, and further account of the *Phorus onustus* I refer the reader to Plate I. Fig. 3. of the genus.

Species 8. (Mus. Cuming.)

PHORUS SOLARIOIDES. *Phor. testâ orbiculari, subtiliter obliquè rugosâ, calculis conchyliorumque frustis vel lapidibus copiosè tectâ; facie infernâ planulatâ, angulatâ, conspicuè spiraliter liratâ, concentricè subtiliter striatâ, medio umbilicatâ, umbilico amplo, profundo; albâ.*

THE SOLARIUM-LIKE PHORUS. Shell orbicular, finely obliquely wrinkled, plentifully covered with pebbles and fragments of shells or stones; under surface flattened, angulated, conspicuously spirally ridged, concentrically finely striated, umbilicated in the centre, umbilicus large and deep; white.

REEVE, Pro. Zool. Soc., 1845.

Hab. Island of St. Nicolas and Zebu, Philippines (found in sandy mud at the depth of six fathoms); Cuming.

This species, of which I have seen several examples collected both by Mr. Cuming and Mr. Hinds, is always of the same uniform small size. It may be chiefly distinguished by the angular structure of the under surface of the whorls, and by its very large umbilicus, which is very similar in appearance to that of a *Solarium*.

The fragments which become agglutinated to the *Phorus Solarioides* are as variable as those of the *Phorus onustus*, consisting either of stones, pebbles, or shells, with very minute portions of shell towards the apex.

Species 9. (Mus. Cuming.)

PHORUS CEREUS. *Phor. testâ orbiculari, lævigatâ, calculis, lapidibus, conchyliorumque frustis copiosè tectâ; facie infernâ leviter concavâ, minutissimè spiraliter et concentricè corrugatâ, medio vix umbilicato; albâ, quasi cereâ.*

THE WAXEN PHORUS. Shell orbicular, smooth, copiously covered with pebbles, stones, and fragments of shells; under surface slightly concave, very minutely spirally and concentrically corrugated, scarcely umbilicated in the centre; white, wax-like.

REEVE, Pro. Zool. Soc., 1845.

Hab. Banguey, north end of the Island of Luzon, Philippines (found in coarse sand at the depth of ten fathoms); Cuming.

The upper surface of the *Phori* is usually so crowded with its agglutinated debris, that the base of the shell must be especially looked to for character. In this species it presents a very different aspect from that of the last, and, in fact, of any that has preceded it. The entire base exhibits a gentle concave depression, with a comparatively smooth surface, being merely very minutely corrugated with all the semi-transparent appearance of wax. The surface of the upper portion of the shell appears to be perfectly smooth.

March 1845.

MONOGRAPH

OF THE GENUS

PECTUNCULUS.

"To ask or search I blame thee not; for Nature
Is as the book of God before thee set,
Wherein to read his wondrous works."—*Milton.*

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3a

PECTUNCULUS.

PLATE I.

Genus PECTUNCULUS, Lamarck.

Testa orbicularis, sublenticularis, æquivalvis, subæquilateralis, epidermide pilosâ sæpè indutâ; umbonibus parùm separatis, aream intermediâ parvâ; valvarum marginibus plerumque crenulatis. Cardo arcuatus, dentibus numerosis obliquis, medianis sæpissimè obsoletis. Ligamentum externum.

Shell orbicular, somewhat lenticular, equivalve, rather equilateral, often covered with a hairy epidermis; umbones but little separated from each other, intervening area small; margins of the valves generally crenulated. Hinge curved, teeth numerous and oblique, middle ones mostly obsolete. Ligament external.

The word Pectunculus, which Klein, Lister, and many writers of the sixteenth century applied indiscriminately to different kinds of bivalve shells, was selected by Lamarck for the purpose of distinguishing such of the Linnæan *Arcæ* as have their teeth set in a semicircle or curve. They differ, however, from the modern *Arcæ* in other not less important particulars, and a good generic distinction was discovered by Poli on examination of the soft parts. Lamarck mentions twenty species of recent Pectunculi, and some few have been since described by Sowerby and Broderip. The total number of species now before me is about fifty; many of them are new, and by far the greater portion have not hitherto been figured.

Species 1. (Mus. Cuming.)

PECTUNCULUS INTERMEDIUS. *Pect. testâ suborbiculari, subglabrâ, subdepressâ; albidâ, castaneo umbones versus pallidè undato-radiatâ; striis radiantibus, subdistantibus, decussatis; intùs albâ, marginibus crenatis; epidermide crassâ, pilosâ.*

THE INTERMEDIATE PECTUNCULUS. Shell rather orbicular, smooth, and a little depressed; white, radiated towards the umbones with pale chestnut zigzag lines; striæ or lines of growth radiating, rather distant, crossing each other transversely and longitudinally; interior white, margins crenated; epidermis thick and hairy.

BRODERIP, Proc. Zool. Soc., 1832, p. 126.

Hab. Iquiqui, coast of Peru. (Found in coarse sand at the depth of ten fathoms.) Cuming.

In all the specimens I have seen of this shell the epidermis is removed from about the umbones in the peculiar manner represented in the plate, and (as Mr. Broderip notices) the pale chestnut radiating zigzag lines which adorn that part are often effaced to a certain extent by erosion or decomposition.

Species 2. (Mus. Cuming.)

PECTUNCULUS OVATUS. *Pect. testâ obovatâ, convexâ, glabrâ, lineis transversis minutissimis ornatâ; albente, umbonibus castaneo pallidè notatis; intùs albâ, marginibus crenatis; epidermide tenui, subvillosâ.*

THE OVAL PECTUNCULUS. Shell exactly oval, convex, smooth, ornamented with very minute transverse lines; whitish, marked with pale chestnut towards the umbones; interior white, margins crenated; epidermis slight and downy.

BRODERIP, Proc. Zool. Soc., 1832, p. 126.

Hab. Island of Lobos, Pacific Ocean. (Found in coarse sand at the depth of seventeen fathoms.) Cuming.

This shell, which has a much lighter and more downy epidermis than the preceding, may be easily recognized by its peculiarly oval form.

Species 3. (Fig. *a* and *b*, Mus. Cuming.)

PECTUNCULUS GIGANTEUS. *Pect. testâ valdè convexâ (juniore depressâ, fig. b.), solidâ, giganteâ, longitudinaliter striatâ, striis contiguis, regularibus, et sulcatâ, sulcis ferè obsoletis; albâ, infernè castaneo tinctâ, supernè maculis rubido-fuscis numerosis undatis, contingentibus, profusè et vividè pictâ; intùs albâ, marginibus (in adultâ) castaneo-nitidis, crenatis; epidermide crassâ, pilosâ.*

THE GIGANTIC PECTUNCULUS. Shell very convex (depressed in an early stage of growth, see fig. *b.*), solid, and of very large size, longitudinally striated; striæ close and regular, grooved in the same direction, grooves almost obsolete; white, stained towards the lower part with chestnut; middle and umbonal portion of the shell profusely and vividly painted with waved reddish-brown spots, touching each other for the most part on both sides; interior white, margins (in the adult shell) of bright

shining chestnut colour, crenated; epidermis thick and hairy.

Hab. Guaymas, Gulf of California. (Found in sandy mud at seven fathoms depth.)

This magnificent shell, which was brought from the above port by Mr. Babb, R.N., accords in some measure with Lamarck's description of his *Pectunculus undulatus*. The figure in Delessert's 'Recueil de Coquilles,' however, of that shell, fully exhibits its specific difference.

Species 4. (Mus. Cuming.)

Pectunculus maculatus. *Pect. testâ orbiculari, subauritâ, subæquilaterali, convexâ; albente, castaneomaculosâ, striis radiantibus subdecussatis, creberrimis; intùs albâ, marginibus crenatis; epidermide fuscâ, villosâ.*

The spotted Pectunculus. Shell orbicular, slightly eared, nearly equilateral, convex, whitish, spotted with chestnut, somewhat decussated with thick-set radiating striæ; interior white, margins crenated; epidermis brown and downy.

Broderip, Proc. Zool. Soc., 1832, p. 126.

Hab. Puerto Potrero, Central America. Cuming.

The spots which peculiarly characterise this shell vary in different individuals, the colouring matter, as in most of the Pectunculi, being very sparingly secreted in an advanced stage of growth.

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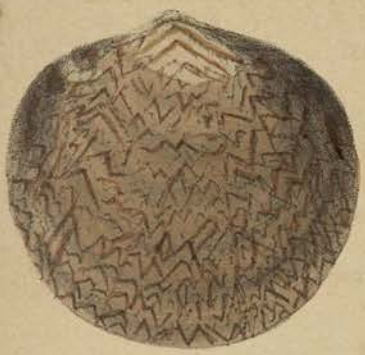

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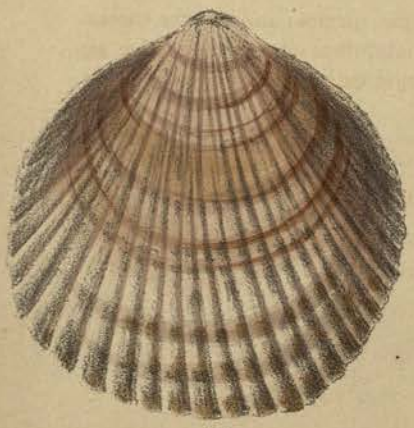

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PECTUNCULUS.

PLATE II.

Species 5. (Mus. Cuming.)

PECTUNCULUS STELLATUS. *Pect. testâ orbiculari-cordatâ, luteo-violaceâ, umbonibus peculiariter albo-stellatis, striis longitudinalibus, remotiusculis, ferè obsoletis, ornatâ.*

THE STARRED PECTUNCULUS. Shell orbicularly heart-shaped, yellowish violet; umbones peculiarly starred with white, ornamented with very faint, rather remote longitudinal striæ.

LAMARCK, Anim. sans vert., vol. vi. p. 491.

Arca stellata, Bruguière.

Venus stellata, Gmelin.

Hab. Coast of Portugal; Lamarck.

This interesting shell may be immediately recognised by the peculiar manner in which the umbones exhibit, on a full aspect, a complete star, one half of the star depicted upon each umbone.

Species 6. (Mus. Cuming.)

PECTUNCULUS SCRIPTUS. *Pect. testâ orbiculari, convexo-depressâ, decussatim striatâ, pallidè carneolâ, lineis rubidis angulatis profusè pictâ.*

THE WRITTEN PECTUNCULUS. Shell orbicular, convexly depressed, striated longitudinally and transversely, pale flesh-colour, profusely painted with reddish angular lines.

LAMARCK, Anim. sans vert., vol. vi. p. 490; Enc. Méth., pl. 311. f. 8.

Arca scripta, Born.

Hab. Island of St. Domingo; Lamarck.

This is a very excellent species, and cannot well be confounded with any of the varieties of *Pectunculus pilosus*, as Deshayes ventures to intimate. The angular zigzag marking in the very richly coloured specimen before me is no less prominent a feature than the finely decussating striæ which ornament its entire surface.

Species 7. (Mus. Cuming.)

PECTUNCULUS FLAMMEUS. *Pect. testâ subtrigonâ, albâ, maculis trigonis flammeis rubido-fuscis vividè pictâ; dentibus minutis; ligamenti aream parvâ.*

THE FLAMING PECTUNCULUS. Shell rather triangular, white, vividly painted with reddish brown, flaming triangular lines; teeth comparatively minute; area of the ligament small.

REEVE, Proc. Zool. Soc., 1843.

Hab. —— ?

I have met with at least a dozen odd valves of this shell, but no true pair. It differs eminently in shape from any hitherto-described species. It is triangularly contracted towards the umbones with a hinge of comparatively small dimensions, and the painting, though not usually regarded of specific importance, is distributed with a great deal of character.

Species 8. (Fig. *a* and *b*, Mus. Cuming.)

PECTUNCULUS LATICOSTATUS. *Pect. testâ orbiculari vel ovato-convexâ, longitudinaliter costatâ, albido-carneolâ, costis latis (in juniore angustioribus) maculis rubidis irregulariter pictâ.*

THE BROAD-RIBBED PECTUNCULUS. Shell orbicularly or ovately convex, longitudinally ribbed, pale flesh-colour; ribs broad (narrower in earlier growth), irregularly painted with reddish spots.

QUOY AND GAIMARD, Voy. de l'Astrol., pl. 77. f. 1 to 6.

Enc. Méth., pl. 310. f. 4. ?

Testa adultior.

Pectunculus ovatus, Quoy (not of Sowerby).

Hab. Bay of Islands, New Zealand.

Although the two shells here figured present a somewhat different aspect, they are unquestionably the same species in different stages of growth. The title of *laticostatus* is referred by MM. Quoy and Gaimard (I should imagine by mistake) to the younger shell, which scarcely differs from the older except in that the ribs are narrower. I have no hesitation in pronouncing them to be of one and the same species; indeed, the characters which the above naturalists cite as distinctive are no other than the common indications of age.

Species 9. (Mus. Cuming.)

PECTUNCULUS VIOLASCENS. *Pect. testâ orbiculari-cordatâ, tumidâ, cinereo-violaceâ, longitudinaliter sulcatâ,*

sulcis distantibus, ferè obsoletis; lunulâ ovatâ, subfuscâ.

The violaceous Pectunculus. Shell orbicularly heart-shaped, swollen, ashy violet-colour, longitudinally grooved; grooves distant, very faint, almost obsolete; lunule ovate, brownish.

Lamarck, Anim. sans vert., vol. vi. p. 493.

Payrandeau, Cat. Moll. de Corse, pl. 2. f. 1.

Testa fossilis.

Pectunculus transversus ?, Lamarck.

Arca insubrica ?, Brocchi.

Hab. Coast of Sicily.

I have followed Lamarck in describing this shell to be longitudinally *grooved*; the character alluded to is, however, very feebly developed.

10

11a

11b

12a

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

PECTUNCULUS.

PLATE III.

Species 10. (Mus. Cuming.)

PECTUNCULUS LONGIOR. *Pect. testâ ellipticâ, albicante, rubido-fuscescente, parce variegatâ aut radiatâ, latere postico breviore, ferrugineo latius biradiato; intus albicante, purpurascente-brunneo paululum infectâ.*

THE LONGER PECTUNCULUS. Shell elliptical, whitish, sparingly variegated or rayed with reddish brown; posterior side shorter, vividly marked with two broad ferruginous rays; interior whitish, a little stained with reddish purple.

SOWERBY, Pro. Zool. Soc., 1833, p. 196.

Hab. Coast of Brazil; T. Miller, R.N.

The above description, though sufficient to distinguish this shell from any other species, cannot be entirely relied upon; for it is only known by odd valves very much polished.

Species 11. (Fig. *a* and *b*, Mus. Cuming.)

PECTUNCULUS PECTINIFORMIS. *Pect. testâ lenticulari, depresso convexâ, radiatim costatâ, albicante, maculis fuscis subquadratis, lineisque ustis plus minusve variegatâ; intus fusco variè tinctâ.*

THE PECTEN-SHAPED PECTUNCULUS. Shell lenticular, depressly convex, strongly ribbed, ribs radiating from the umbones; whitish, more or less variegated with cross burnt lines and squarish brown spots; interior variously stained with brown.

Variety *α*. (Fig. 11 *a*.)

Testa costis subnodulosis aut liratis.

Shell with the ribs nodulated or ridged.

LAMARCK, Anim. sans vert., vol. vi. p. 494.

Arca Pectunculus, Linnæus, Syst. Nat., p. 1142.

CHEMNITZ, Conch., vol. vii. pl. 58. f. 568 and 569.

Hab. Island of Masbate, Philippines; Cuming.

Variety *β*. (Fig. 11 *b*.)

Testa major, costis latioribus, maculis sæpissimè cæruleis.

Shell larger, ribs wider, spots generally bluish.

DE BLAINVILLE, Man. de Malac., pl. 65. f. 3; Enc. Méth., pl. 311. f. 5.

Hab. Island of Ticao, Philippines; Cuming.

Species 12. (Fig. *a* and *b*, Mus. Cuming.)

PECTUNCULUS GLYCIMERIS. *Pect. testâ ovato-orbiculari, inæquilaterali, depresso-convexâ, versus cardinem attenuatâ, anticè plus minusve angulatâ, transversim et longitudinaliter striatâ; pallidè carneolâ, maculis rubris angularibus variegatâ, epidermide pilosâ propè ad marginem indutâ.*

THE SWEET-SAVOURED PECTUNCULUS. Shell ovately orbicular, attenuated towards the hinge, inequilateral, depressly convex, more or less angulated anteriorly, transversely and longitudinally striated; pale flesh-colour, variegated with angular red spots, and covered near the margin with a soft hairy epidermis.

TURTON, Conch. Ins. Brit., p. 171. pl. 12. f. 1.

MACGILLIVRAY, Moll. Aberdeen, p. 338.

Arca glycimeris, Linnæus.

Hab. Coasts of Britain.

The specimens here figured are selected as extreme varieties of the species, and to show how greatly this shell varies in form, though always preserving its anterior angulation. That represented at Fig. *a*. was dredged up off Falmouth, and the latter was picked up by Mr. Cuming alive after a gale of wind on the west coast of Cornwall.

Two species seem evidently to have been confounded under this title: *Pectunculus glycimeris*, of Lamarck, is *Pectunculus Siculus* mihi.

Species 13. (Mus. Cuming.)

PECTUNCULUS PILOSUS. *Pect. testâ orbiculari, æquilaterali, tumido-convexâ, decussatim subtilissimè striatâ, fuscescente, fusco-variegatâ, epidermide crassâ pilosâ indutâ.*

THE HAIRY PECTUNCULUS. Shell orbicular, equilateral, tumidly convex, very finely decussately striated, brownish, variegated with darker brown, covered with a thick hairy epidermis.

LAMARCK, Anim. sans vert., vol. vi. p. 2; Enc. Méth., pl. 310. f. 2.

Arca pilosa, Linnæus.

Varieties:

Arca undata, Linnæus.

Pectunculus marmoratus, Lamarck.

Hab. Mediterranean, Coast of Sicily.

This species is rounder and more tumid than the preceding, and is always of a darker colour; it never exhibits any anterior angulation, and the epidermis is thicker and softer.

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PECTUNCULUS.

PLATE IV.

Species 14. (Mus. Cuming.)

PECTUNCULUS PARCIPICTUS. *Pect. testâ subobliquè cordatâ, radiatim costatâ, costis planis, in medio sæpè sulcatis, costarum interstitiis profundis; albâ, luteo-castaneâ parcè variegatâ; intus albâ, anticè purpureo-tinctâ.*

THE SPARINGLY PAINTED PECTUNCULUS. Shell rather obliquely heart-shaped, radiately ribbed; ribs flat, often grooved up the middle, interstices between the ribs deep; white, sparingly variegated with yellowish chestnut undulated zones and patches; interior white, stained on the anterior side with purple.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

The ribs in this shell are peculiarly firm, and squarely grooved out as it were, and they are often slightly rutted about half-way up the middle.

Species 15. (Mus. Cuming.)

PECTUNCULUS ASSIMILIS. *Pect. testâ suborbiculari-cordiformi, solidâ, inæquilaterali, altitudine longitudinem superante; gibbosâ, radiatim sulcatâ, sulcis lirisque striatis; albâ, fasciis pluribus, rubido-brunneis, acutissimè undulatis, obliquè pictâ; liris brunnescente leviter tinctis.*

THE ASSIMILATING PECTUNCULUS. Shell somewhat orbicularly heart-shaped, solid, inequilateral, height exceeding the length; gibbous, radiately grooved, grooves and intermediate ridges striated; white, obliquely painted with several very sharply undulated reddish brown bands; ridges faintly stained with the same colour.

SOWERBY, Pro. Zool. Soc., 1832.

Hab. Puerto Portrero, and Bay of Guayaquil, Central America (found in sandy mud and gravel in from eight to twelve fathoms); Cuming.

This interesting species somewhat assimilates to the following; it differs however constantly both in form and colour, it is more distinctly grooved too, and the cross bands are narrower, more in number, and more sharply undulated.

Species 16. (Mus. Cuming.)

PECTUNCULUS INÆQUALIS. *Pect. testâ subcordiformi, solidâ, obliquâ, inæquilaterali, altitudine longitudinem superante; gibbosâ, radiatim striatâ, striis obtusis, per costas vel fasciculos costiformes congestis, dispositis; interstitiis striatis; albâ, fasciis undulatis quatuor quinisve ferrugineo-nigerrimo-purpureo transversim vividè pictâ, costis roseo cæruleoque plus minusve tinctis.*

THE UNEQUAL PECTUNCULUS. Shell somewhat heart-shaped, solid, oblique, inequilateral, height exceeding the length, gibbous, radiately striated; striæ obtuse, ranged together in the form of ribs or rib-like clusters, interstices striated; white, vividly painted across with four or five rusty black purple bands, ribs more or less stained with pink and purplish blue.

SOWERBY, Pro. Zool. Soc., 1832.

Hab. Bay of Panama and Real Llejos (found in sandy mud at the depth of ten fathoms); Cuming.

This strikingly marked shell has been figured by Wood (Ind. Test. Supp., pl. 2, *Arca*, f. 11.) for the *P. pectiniformis*.

Species 17. (Fig. *a* and *b*, Mus. Cuming.)

PECTUNCULUS AURIFLUUS. *Pect. testâ orbiculari-cordatâ, inæquilaterali, radiatim costatâ, costis obsoletè sulcatis; albâ, transversim auriflua, anticè maculis aureis nigerrimo-fusco marginatis.*

THE GOLD-FLOWING PECTUNCULUS. Shell orbicularly heart-shaped, inequilateral, radiately ribbed, ribs obsoletely grooved down the middle; white, richly painted with transversely flowing patches of bright orange; patches on the anterior half of the shell edged with blackish brown.

REEVE, Pro. Zool. Soc., 1843.

Hab. Island of Capul, Philippines (found in coral sand upon the reefs); Cuming.

This new and beautiful shell may be easily recognised by its very bright orange painting: the adult specimen represented at Fig. *a*, compared with the younger, Fig. *b*, is singularly higher in proportion, and the groove running half-way up the ribs of the latter is quite obsolete in the former.

Species 18. (Mus. Cuming.)

PECTUNCULUS HOLOSERICUS. *Pect. testâ suborbiculari, lævi, albidâ, multiradiatâ, epidermide sericeâ indutâ.*

THE VELVET PECTUNCULUS. Shell nearly orbicular, smooth, whitish, finely radiated, entirely covered with a dark, short, silken, velvet epidermis.

REEVE, Pro. Zool. Soc., 1843.

Hab. Australia.

The peculiar close velvety softness of the epidermis alone distinguishes this species from any hitherto described.

Species 19. (Mus. Cuming.)

PECTUNCULUS ROSEUS. *Pect. testâ orbiculari, radiatim costatâ, costis angustis, numerosis, confertis; pallidè carneolâ, costis roseo-maculatis, maculis plus minusve elongatis.*

THE ROSE PECTUNCULUS. Shell orbicular, radiately ribbed; ribs narrow, numerous, and close-set; pale flesh-colour, ribs rose-spotted, spots more or less lengthened.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

I have ventured to distinguish this bright rose-tinted shell as a new species, but must at the same time express my fear that it may prove to be a variety of the *Pectunculus laticostatus* (Sp. 8.) in a very early stage of growth.

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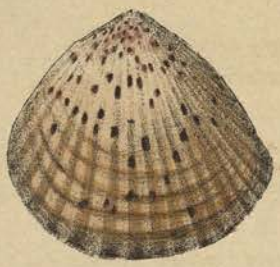

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Sowerby del.

Rivers lith.

PECTUNCULUS.

PLATE V.

Species 20. (Mus. Cuming.)

PECTUNCULUS BICOLOR. *Pect. testâ suborbiculari, umbones versus attenuatâ, longitudinaliter sulcatâ, sulcis numerosis, angustis; albidâ, violaceo nebulosâ, maculis trigonis ferrugineo-rubidis irregulariter pictâ.*

THE TWO-COLOURED PECTUNCULUS. Shell somewhat orbicular, attenuated towards the umbones, longitudinally grooved, grooves numerous and very narrow; whitish, clouded with violet, and irregularly painted with triangular rusty reddish spots.

REEVE, Pro. Zool. Soc., 1843.

Hab. Gulf of California.

Mr. Gray appears to have mistaken this shell (Zoology of Beechey's Voyage in the Blossom) for the *Pectunculus inæqualis.*

Species 21. (Mus. Cuming.)

PECTUNCULUS PALLIUM. *Pect. testâ obliquè ovatâ, subquadratâ, radiatim costatâ, costis lævibus, prope marginem subobsoletis; luteolâ, maculis rubidis, quadratis, sparsis, vividè pictâ.*

THE MANTLE PECTUNCULUS. Shell obliquely ovate, squarish; radiately ribbed, ribs nearly obsolete towards the margin; yellowish, vividly painted with scattered square reddish spots.

REEVE, Pro. Zool. Soc., 1843.

Hab. Zanzibar.

This shell may be easily recognised by the dark ruddy spots which are sparingly scattered here and there upon the warm uniform ground which covers the surface. The cardinal portion of the shell is rather solid.

Species 22. (Mus. Cuming.)

PECTUNCULUS NODOSUS. *Pect. testâ suborbiculari, fulvo, furvo castaneove variegatâ; radiatim costatâ, costis nodosis; intus albidâ, anticè fuscescente.*

THE KNOBBED PECTUNCULUS. Shell somewhat orbicular, yellow, variegated with dusky brown or chestnut; radiately ribbed, ribs knobbed; interior whitish, brown anteriorly.

REEVE, Pro. Zool. Soc., 1843.

Hab. Ceylon.

The knobs on the ribs, by which this species is chiefly characterized, are much more strongly developed on the posterior side of the shell; on the anterior side they are almost obsolete.

Species 23. (Mus. Cuming.)

PECTUNCULUS RUBENS. *Pect. testâ orbiculari, valdè convexâ, striis tenuissimis decussatâ; pallidè rubente, maculis lineisque rubris numerosis vividè pictâ; umbonibus subobliquis; intùs fuscescente.*

THE RED PECTUNCULUS. Shell orbicular, very convex, decussated with very fine striæ; pale red, vividly painted with numerous blotches and longitudinal lines of dark red; umbones rather oblique; interior brownish.

LAMARCK, Anim. sans. vert. (Deshayes' edit.) vol. vi. p. 490.

Hab. —— ?

This shell, which I believe to be the *Pectunculus rubens* of Lamarck, differs materially from the *Pectunculus glycimeris.* It is rounder, considerably more ventricose, and profusely splashed with a much deeper red.

Species 24. (Mus. Cuming.)

PECTUNCULUS PENNACEUS. *Pect. testâ orbiculari, tumidâ, decussatim striatâ, striis longitudinalibus fortioribus; albidâ, maculis fuscis grandibus et parvis irregulariter pictâ; umbonibus ligamenti extremitate anticâ inflexis.*

THE FEATHERED PECTUNCULUS. Shell orbicular, swollen, decussately striated, longitudinal striæ the stronger; whitish, irregularly painted with large and small dark brown spots; umbones bent inwards to the anterior end of the ligament.

LAMARCK, Anim. sans vert. (Deshayes' edit.) vol. vi. p. 490.

Hab. Island of St. Thomas, &c., West Indies.

The umbones of this shell meet in a remarkable manner quite at one extremity of the ligament. It often attains a larger size than that of the specimen here figured.

Species 25. (Mus. Cuming.)

PECTUNCULUS LINEATUS. *Pect. testâ orbiculari, convexâ, subauriculatâ; decussatim striatâ, striis longitudina-*

libus fortioribus; albidâ, posticè et medianè maculis castaneis irregulariter nebulosâ, anticè lineis longitudinalibus castaneis vividè pictâ; umbonibus centralibus.

The lineated Pectunculus. Shell orbicular, convex, slightly auriculated, decussately striated, longitudinal striæ the stronger; whitish, clouded posteriorly and about the middle with chestnut spots, and vividly painted anteriorly with dark longitudinal lines; umbones central.

Reeve, Pro. Zool. Soc., 1843.

Hab. West Indies.

The painting of this species is not much unlike that of the preceding; the anterior side of the shell, however, is white and very peculiarly lineated.

Species 26. (Mus. Cuming.)

Pectunculus multicostatus. *Pect. testâ orbiculari, radiatim costatâ, costis numerosissimis rotundatis et distinctis; albâ, castaneo, rubiginoso, cinereoque variegatâ; umbonibus anticè inflexis.*

The many-ribbed Pectunculus. Shell orbicular, radiately ribbed, ribs very numerous, rounded and distinct; white, variegated with chestnut, rust, and ash colours; umbones bent in anteriorly.

Sowerby, Pro. Zoql. Soc., 1832.

Hab. Bay of Guayaquil (found in coarse sand and gravel at the depth of twelve fathoms); Cuming.

This very beautiful Pectunculus has somewhat the appearance of a Cardium.

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PECTUNCULUS.

PLATE VI.

Species 27. (Mus. Cuming.)

PECTUNCULUS STRIATULARIS. *Pect. testâ depresso-cordatâ; albido-rufescente, striis lineisque rufis longitudinalibus, numerosissimis, ornatâ; umbonibus subobliquis.*

THE FINELY-STRIATED PECTUNCULUS. Shell depressly heart-shaped; ruddy white, ornamented with a number of longitudinal red lines and striæ; umbones rather oblique, tipped with white.

LAMARCK, Anim. sans. vert., (Deshayes' edit.) vol. vi. p. 493.

Hab. Swan River.

In light varieties of this species the red longitudinal lines are much more vividly painted than in the specimen here represented, particularly towards the umbones.

Species 28. (Mus. Cuming.)

PECTUNCULUS PECTINATUS. *Pect. testâ lenticulari, depresso-convexâ, longitudinaliter costatâ, costis crebris, transversè striatis; albidâ, maculis cæruleo-fuscis paucis, subquadratis, et lineis variè pictâ.*

THE PECTINATED PECTUNCULUS. Shell lenticular, depressly convex, longitudinally ribbed, ribs numerous, transversely striated; whitish, variously painted with lines and a few squarish blue-brown blotches.

LAMARCK, Anim. sans vert., (Deshayes' edit.) vol. vi. p. 494.

Arca Pectunculus, minor, Chemnitz, Conch., vol. vii. pl. 58. f. 570, 571.

Hab. Island of La Plata (found in coral sand at the depth of seventeen fathoms); Cuming.

The ribs in this shell are obliquely crossed here and there with fine lines in the same manner as those of the *P. Pectiniformis*; the dark blotching is somewhat irregular, and always thicker towards the umbones.

Species 29. (Mus. Cuming.)

PECTUNCULUS TESSELLATUS. *Pect. testâ orbiculari, umbones versus triangulariter attenuatâ, subglobosâ, albâ, purpureo-laccâ tessellatâ et variegatâ; longitudinaliter costatâ, costis rotundatis, subdistantibus.*

THE TESSELLATED PECTUNCULUS. Shell orbicular, triangularly attenuated towards the umbones, rather globose, white, tessellated and variegated with purple lake; longitudinally ribbed, ribs rounded and rather distant.

SOWERBY, Pro. Zool. Soc., 1832.

Hab. Monte Christi and Xipixapi, West Columbia (found in sandy mud at the depth of ten fathoms); Cuming.

A solid and globose shell, very neatly tessellated with rich purple lake spots.

Species 30. (Mus. Cuming.)

PECTUNCULUS ANGULATUS. *Pect. testâ depresso-cordatâ, anticè angulatâ, longitudinaliter sulcato-lineatâ et striatâ; castaneo-fuscâ, albâ plùs minùsve nebulosâ, aream ligamenti breviusculâ.*

THE ANGULATED PECTUNCULUS. Shell depressly cordate, anteriorly angulated, longitudinally deeply lined and striated; dark chestnut-brown, more or less splashed with white; area of the ligament rather short.

LAMARCK, Anim. sans vert., (Deshayes' edit.) vol. vi. p. 491.

Arca subangulata, Chemnitz, Conch., vol. vii. pl. 57. f. 567.

Hab. Catbalonga, Island of Samar, Philippines (found in coarse sand at the depth of eight fathoms); Cuming.

The specimen here figured exhibits no white, excepting at the tips of the umbones; but I have seen specimens with the angulated portion of the shell almost entirely white, and it is a very pure white. The longitudinally-grooved lines of a light fulvous colour are very finely wrought upon the dark chestnut ground of the shell.

Species 31. (Mus. Cuming.)

PECTUNCULUS STRIGILATUS. *Pect. testâ suborbiculari, umbones versus triangulariter attenuatâ, ventricosâ; albidâ, roseo tinctâ, et rubiginoso striatâ et variegatâ; longitudinaliter costatâ, costis rotundatis, subdistantibus, interstitiis lævibus.*

THE COMB-LIKE PECTUNCULUS. Shell nearly orbicular, triangularly attenuated towards the umbones, ventricose; whitish, stained with rose, striated and variegated with rust colour; longitudinally ribbed, ribs rounded, rather distant, interstices smooth.

SOWERBY, Pro. Zool. Soc., 1832.

Hab. St. Elena, South America (found in sandy mud at the depth of from six to eight fathoms); Cuming.

A very solid broadly ribbed shell, so peculiarly contracted towards the umbones that the hinge almost describes an angle.

Species 32. (Mus. Cuming.)

PECTUNCULUS CASTANEUS. *Pect. testâ orbiculari, subæquilaterali, longitudinaliter costatâ, costis crebris, striatis; albâ, castaneo maculatâ, maculis in zonis undulatis transversè dispositis.*

THE CHESTNUT-COLOURED PECTUNCULUS. Shell orbicular, nearly equilateral, longitudinally ribbed, ribs numerous, striated; white, spotted with chestnut, spots arranged in transverse waved zones.

LAMARCK, Anim. sans vert. (Deshayes' edit.), vol. vi. p. 493.

Arca variegata, Chemnitz, Conch., vol. vii. pl. 57, f. 562.

Hab. West Indies.

I have not met with any specimen of this species so richly variegated with colour, as that represented by Chemnitz.

Species 33. (Mus. Cuming.)

PECTUNCULUS OBLIQUUS. *Pect. testâ transversâ, obliquè ovatâ; albido-rufescente, maculis cuspidiformibus spadiceis profusè pictâ; intùs nigerrimo-fuscâ; umbonibus centralibus.*

THE OBLIQUE PECTUNCULUS. Shell transverse, obliquely ovate; ruddy white, profusely painted with reddish-brown arrow-head-shaped spots; interior very dark brown; umbones central.

REEVE, Pro. Zool. Soc., 1843.

Hab. Swan River; Lieut. Collie.

The whole of the inside of this shell, with the exception of the anterior margin and muscular impression, is of a very deep blackish brown.

Species 34. (Mus. Cuming.)

PECTUNCULUS TELLINÆFORMIS. *Pect. testâ ovatâ, transversâ, subdepressâ, radiatìm costatâ, costis subobsoletis; albidâ, anticè et supernè carneo-fusco tinctâ; intus subfuscâ, posticè albicante; umbonibus vix obliquis.*

THE TELLINA-SHAPED PECTUNCULUS. Shell ovate, transverse, rather depressed, radiately ribbed, ribs almost obsolete; whitish, stained anteriorly and around the ventral margin with fleshy brown; interior rather brown, posteriorly whitish; umbones slightly oblique.

REEVE, Pro. Zool. Soc., 1843.

Hab. Rio Janeiro; Miller.

This shell differs from the preceding in being more transverse, and faintly ribbed; the interior is not so dark, nor does the outer surface exhibit the least indication of any spots or other dark marks.

Species 35. (Mus. Cuming.)

PECTUNCULUS TENUICOSTATUS. *Pect. testâ orbiculari, subventricosâ, subtilissimè costatâ, costis quasi filis, numerosis, interstitiis epidermide lineariter insertâ; fuscescente, costis pallidioribus; umbonibus subcentralibus.*

THE THIN-RIBBED PECTUNCULUS. Shell orbicular, rather ventricose, very finely ribbed; ribs like threads, very numerous, with the epidermis inserted in lines in the interstices; brownish, ribs paler; umbones nearly central.

REEVE, Pro. Zool. Soc. 1843.

Hab. Australia.

The valves of this shell are entirely covered with beautiful thread-like ribs, and the interstices are filled with fine roots of epidermis arranged in from three to four rows.

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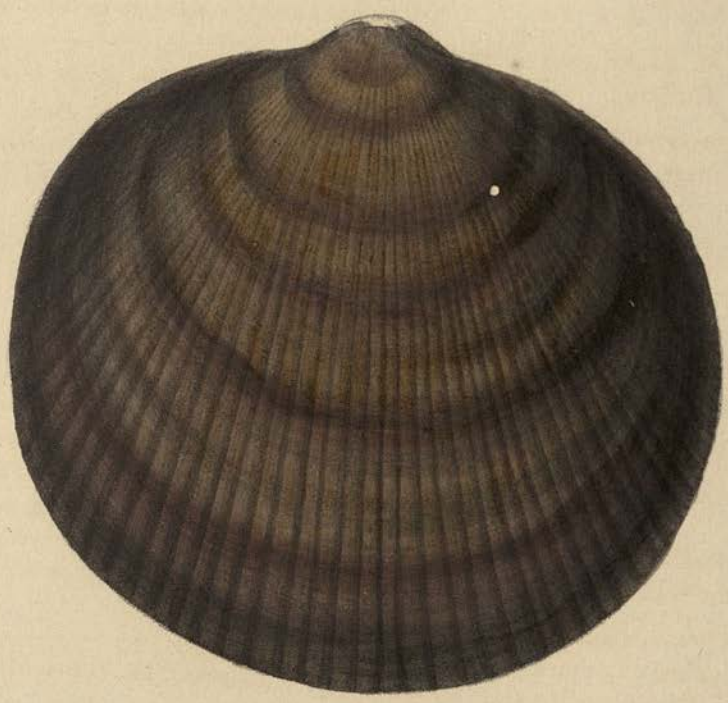

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Sowerby del.

Reeve lith.

PECTUNCULUS.

PLATE VII.

Species 36. (Mus. Cuming.)

PECTUNCULUS SPURCUS. *Pect. testâ subquadrato-ovali, gibbâ, glauco-fuscâ, longitudinaliter costatâ, costis numerosis, angustis, subtilissimè striatis; umbonibus albicantibus, obliquis.*

THE DIRTY PECTUNCULUS. Shell squarely oval, gibbous, greyish brown, longitudinally ribbed, ribs numerous, narrow, and very finely striated; umbones whitish, oblique.

REEVE, Pro. Zool. Soc., 1843.

Hab. Bay of San Carlos (found in coarse sand at the depth of sixteen fathoms); Cuming.

The width of this little species from the umbones to the margin is comparatively shorter than that of any other species.

Species 37. (Mus. Cuming.)

PECTUNCULUS PERTUSUS. *Pect. testâ orbiculari, albâ, fusco undatim pictâ; radiatim costatâ, costis subtilissimè pertusis; umbonibus centralibus.*

THE PRICKED PECTUNCULUS. Shell orbicular, white, painted with brown waved spots; radiately ribbed, ribs very finely pricked; umbones central.

REEVE, Pro. Zool. Soc., 1843.

Hab. Islands of Mindanao and Luzon, Philippines (found in coarse sand at the depth of ten fathoms); Cuming.

This interesting little species presents a marked peculiarity in the ribs being finely pricked on each side. Two or three specimens only were collected by Mr. Cuming at the above-mentioned islands.

Species 38. (Mus. Cuming.)

PECTUNCULUS OCULATUS. *Pect. testâ sub-Pectiniformi, radiatim costatâ, fuscâ, maculis albis, supernè nigro-marginatis, sparsim et irregulariter ornatâ; umbonibus centralibus, subobliquis.*

THE EYED PECTUNCULUS. Shell somewhat Pecten-shaped, radiately ribbed, brown, sparingly and irregularly ornamented with white spots or spaces bordered round with dark brown; umbones central but rather oblique.

REEVE, Pro. Zool. Soc., 1843.

Hab. West Indies.

The ground-colour of this shell being a very dark chestnut-brown, the scattered white spots or spaces have a very prominent appearance. Since the specimen above described was figured, M. Deshayes has kindly lent me a specimen in which the white spaces are considerably larger and more characteristic; and I have also had the pleasure of examining a specimen of exceeding beauty, in the collection of M. Delessert, whose kindness in allowing me to have a drawing made of it was unfortunately too late to be of service.

Species 39. (Mus. Cuming.)

PECTUNCULUS CANCELLATUS. *Pect. testâ obliquè Pectiniformi, striis subtilissimè cancellatâ; albâ, epidermide luteâ holosericâ partim indutâ; umbonibus prominentibus, centralibus.*

THE CANCELLATED PECTUNCULUS. Shell obliquely Pecten-shaped, finely cancellated with striæ; white, partially covered with a yellow silken epidermis; umbones prominent, central.

REEVE, Pro. Zool. Soc., 1843.

Hab. Singapore (found in sandy mud at the depth of seven to ten fathoms); Cuming.

This little shell is very thin and fragile, and perfectly white; the entire surface being delicately cancellated and covered towards the margin with a thick pale yellow epidermis. There is no possibility of confounding it with any other species.

Species 40. (Mus. Metcalfe.)

PECTUNCULUS MORUM. *Pect. testâ sub-Pectiniformi, pallidè purpureo-rubrâ, maculis rubidis elongatis sparsim et irregulariter pictâ; radiatim costatâ, costis lævibus; umbonibus subcentralibus.*

THE MULBERRY PECTUNCULUS. Shell somewhat Pecten-shaped, pale pink, sparingly and irregularly painted with long ruddy spots; radiately ribbed, ribs smooth, umbones nearly central.

REEVE, Pro. Zool. Soc., 1843.

Hab. Madagascar?

A very pretty species, in which the ribs radiate somewhat more obliquely than usual; the general appearance of the shell is not much unlike that of the *P. tessellatus*; it is however lighter and more depressed, with colour and spotting of somewhat different character.

Species 41. (Mus. Brit.)

PECTUNCULUS SICULUS. *Pect. testâ orbiculari, depressiusculâ, subæquilaterali, longitudinaliter sulcatâ et striatâ; rubido-castaneâ, fusco transversim zonatâ, zonis sæpè obscuris; umbonibus testæ junioris interdum albimaculatis.*

THE SICILIAN PECTUNCULUS. Shell orbicular, rather depressed, nearly equilateral, longitudinally grooved and striated; reddish chestnut-colour, transversely zoned with brown, zones sometimes obscure; umbones of the young shell sometimes spotted with white.

REEVE, Pro. Zool. Soc., 1843.

Pectunculus glycimeris, Lamarck, Philippi.

Testa junior.

Arca bimaculata, Poli.

Hab. Mediterranean, Coast of Sicily.

Having adopted the old *P. glycimeris* of British authors, I distinguish the *P. glycimeris* of Lamarck by the above new title. Through some unaccountable neglect, these two very different shells have been hitherto published under the same title, and it is hoped that this present amendment will be appreciated.

Species 42. (Mus. Cuming.)

PECTUNCULUS MULTISTRIATUS. *Pect. testâ trigono-ovatâ, valdè compressâ, longitudinaliter multi- et tenuistriatâ, rubicundâ; intus fuscâ, margine planato, integerrimo; umbonibus incurvis.*

THE MUCH-STRIATED PECTUNCULUS. Shell triangularly ovate, very compressed, longitudinally much and finely striated; striæ slightly waved, interior brown, margin flat and entire; umbones curved inwards.

DESHAYES, Lamarck, Anim. sans vert. (new edit.), vol. vi. p. 495.

Arca multistriata, Forskael, Desc. Anim. p. 123; Chemnitz, Conch. pl. 58. f. 573.

Hab. Red Sea.

This shell, which does not appear to have been known to Lamarck, is remarkably distinct from any other species of the genus. It is very depressed, and particularly flat within round the margin; the hinge is very small and contracted in comparison with others.

Species 43. (Mus. Brit.)

PECTUNCULUS MARMORATUS. *Pect. testâ lenticulari, compressiusculâ, decussatim, vix manifestè, striatâ, albâ, flavescente elegantissimè marmoratâ; umbonibus albis, approximatis; margine acuto, denticulato.*

THE MARBLED PECTUNCULUS. Shell lenticular, rather compressed, decussately, rather indistinctly, striated; white, elegantly marbled with pale yellow; umbones white, approximating; margin acute, denticulated.

Arca marmorata, Chemnitz, Conch., vol. vii. p. 228. pl. 57. f. 563.

Hab. ——?

This species, it must be understood, is not the *Pectunculus marmoratus* of Lamarck, though he refers to the same figure in Chemnitz as that noted above. The specimen described by that illustrious author, which I have lately had the pleasure of examining, is nothing more than a young individual of the *P. glycimeris*, as stated by Deshayes in his edition of the 'Anim. sans vert.,' note, p. 489. There are now two specimens of the true *P. marmoratus*, figured and described by Chemnitz, (so far at least as my opinion leads me,) in the British Museum, from the celebrated collection of W. J. Broderip, Esq., and I am not aware of the existence of any other.

[For Species 44, see Plate VIII., a figure of the *Pectunculus intermedius* (Species 1) having been substituted in its place by mistake.]

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45 a

45 b

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48 b

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PECTUNCULUS.

PLATE VIII.

Species 44. (Mus. Belcher.)

PECTUNCULUS PECTENOIDES. *Pect. testâ lenticulari, depresso-convexâ, radiatim costatâ; costis subobliquis, compressis, depresso-planis, interstitiis eximiè excavatis; incarnato-albâ, rubido-fusco profusè variegatâ et maculatâ; intus albâ, anticè fuscâ.*

THE PECTEN-LIKE PECTUNCULUS. Shell lenticular, depressly convex, radiately ribbed; ribs somewhat oblique, compressed, depressly flat, with the interstices delicately excavated; fleshy white, profusely variegated and spotted with reddish-brown; interior of the shell white, deeply stained with brown on the anterior side.

DESHAYES, Cuv. Règ. An. (Fortin and Masson's illustrated edition) Mollusques, pl. 87. f. 8.

Hab. Bay of Panama (found in soft mud at the depth of seven fathoms); Hinds.

After receiving from M. Deshayes the example of this species originally described by him, Mr. Hinds supplied me with finer specimens from the collection of Captain Belcher. Care must be taken not to confound the *Pectunculus Pectenoides* with the *Pectunculi pectinatus* or *Pectiniformis*: the chief peculiarity of the species under consideration is the flat compressed formation of the ribs, and the delicate manner in which the interstices between them are hollowed out.

Species 45. (Fig. *a* and *b*, Musée Royale, Paris.)

PECTUNCULUS VITREUS. *Pect. testâ orbiculari, planulatâ, subauritâ, tenui, longitudinaliter costatâ, costis transversè striatis; albidâ, aurantio-fusco pallidè maculatâ; intus albâ.*

THE BRITTLE PECTUNCULUS. Shell orbicular, flattish, somewhat eared, thin, longitudinally ribbed, ribs transversely striated; whitish, faintly spotted with orange-brown; interior white.

LAMARCK, Anim. sans vert. (Deshayes' edit.), vol. vi. p. 495.

Hab. South Seas? Lamarck.

This interesting species is only known at present by the single valve, here represented, in the Musée Royale at the Jardin des Plantes, Paris, and which, says Lamarck, was from the voyage of M. Péron. It has a remarkably flat brittle appearance, and is certainly very distinct from any other species. The hinge describes an angle rather than a curve, and forms as characteristic a peculiarity as the scattered faint orange spots which ornament the outer surface.

Species 46. (Mus. Belcher.)

PECTUNCULUS PERDIX. *Pleur. testâ orbiculato-cordatâ, subauritâ, radiatim costatâ; costis planulatis, subindistinctis, longitudinaliter striatis, strigis rubido-fuscis, transversis, angulato-undatis, profusè pictis.*

THE PARTRIDGE PECTUNCULUS. Shell orbicularly heart-shaped, a little eared, radiately ribbed; ribs flat, rather indistinct, longitudinally striated, and profusely painted with transverse, angularly waved streaks of reddish-brown.

REEVE, Pro. Zool. Soc., 1843.

Hab. Straits of Malacca (found in mud at the depth of seventeen fathoms); Hinds.

The form of this shell approximates very closely to that of the *Pectunculus zonalis* (vide Pl. IX.), but the painting of it is of a very different character. The beautiful specimen here figured, collected by Captain Belcher, is the only example of the species I have seen, with the exception of a small, worn, odd valve in the collection of M. Deshayes.

Species 47. (Mus. Cuming.)

PECTUNCULUS SPADICEUS. *Pect. testâ orbiculari, radiatim striatâ, pallidè spadiceâ, umbones versus albâ, strigis latis, undatis, ornatâ; epidermide holosericâ; intus albâ, margine exiliter crenulato.*

THE REDDISH-BROWN PECTUNCULUS. Shell orbicular, radiately striated; pale reddish-brown, white towards the umbones, ornamented with broad waved streaks; epidermis soft and velvety; interior white, margin finely crenulated.

REEVE, Pro. Zool. Soc., 1843.

Hab. —— ?

There is no very striking peculiarity in this species, although it is too distinct from any other to require comparison. I have seen several specimens of it both in London and Paris, but have not succeeded in obtaining its true locality.

Species 48. (Fig. *a* and *b*, Musée Royale, Paris.)

Pectunculus formosus. *Pect. testâ lenticulari, subdepressâ, vel lævi vel subobscurè radiatâ, subtilissimè circulariter striatâ; luteo-lacteâ, maculis sparsis violaceo-purpureis, longitudinaliter inquinatis, formosè pictâ.*

The beautiful Pectunculus. Shell lenticular, slightly depressed, either smooth or somewhat obscurely radiated, and very finely circularly striated; bright yellowish cream-colour, shading into reddish-brown at the base, beautifully painted with longitudinally smeared spots of violet-purple.

Reeve, Pro. Zool. Soc., 1843.

Hab. —— ?

There are two or three specimens of this handsome shell at Paris, both in the collection at the Jardin des Plantes and in that of M. Delessert.

9 b

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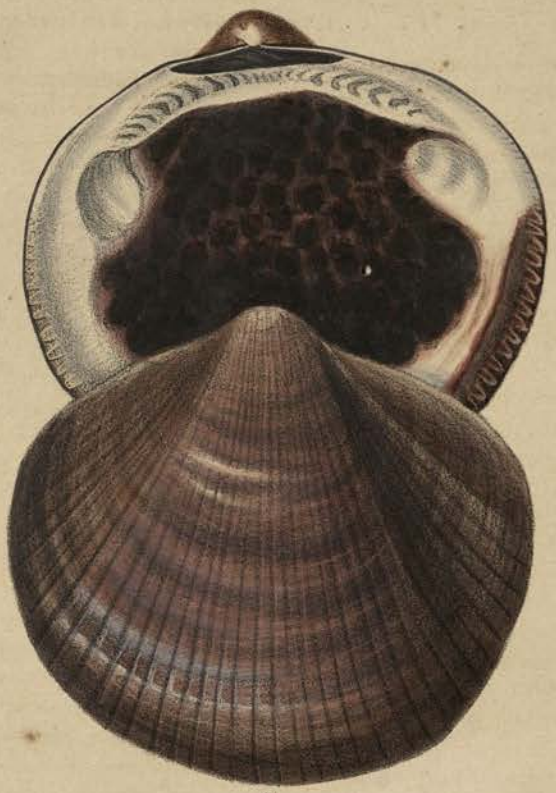

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19 b

50 b

Sowerby, del et lith.

prel. lith. Linn imp.

PECTUNCULUS.

PLATE IX.

Species 9. (Second notice.)

Variety β. (Fig. 9 *b*, Mus. Cuming.)

PECTUNCULUS VIOLASCENS. *Testa purpureo-violacea, cinereo zonata, maculis albidis numerosis undulatis prope umbones aspersa; striis longitudinalibus simplicissimis, striis numerosis, subtilissimè pertusis, decussatis.*

Shell purple-violet, zoned with dark ash-colour, and sprinkled near the umbones with numerous waved specks of white; longitudinal striæ very simple, crossed transversely with numerous finely pricked striæ.

Pectunculus zonalis ? Lamarck.

Hab. Mediterranean.

There appears to be little doubt but that Lamarck's *Pectunculus zonalis* is nothing more than a variety of the *Pectunculus violascens*, somewhat approaching to that here represented.

The figure given of this species at Plate II. is so indifferently executed, that I embrace the opportunity of illustrating it with a more striking example.

Species 49. (Mus. Cuming.)

PECTUNCULUS SERICATUS. *Pect. testâ orbiculari, pectiniformi, depressiusculâ, albidâ, rosaceo-fusco sparsim tinctâ et maculatâ, epidermide sericeâ crassâ indutâ; radiatim sulcatâ, sulcis subdistantibus; intus albâ.*

THE SILK-CLAD PECTUNCULUS. Shell orbicular, somewhat pecten-shaped, rather depressed, whitish, stained and spotted with light pinkish brown, covered with a thick silken epidermis; radiately grooved, grooves rather distant; interior white.

REEVE, Pro. Zool. Soc., 1843.

Hab. Island of Tortola, West Indies.

This exceedingly delicate shell is remarkable for its glossy silken epidermis; the hinge-shelf in the interior of each valve is nearly as broad and solid as that of the *Pectunculus strigilatus*, and the teeth are as closely set; the shell altogether exhibits many characters in common with that species, but no indication of the peculiar manner in which it is attenuated towards the umbones.

This is the only specimen I have seen at present.

Species 50. (Fig. *a*, Mus. Cuming; Fig. *b*, Mus. Brit.)

PECTUNCULUS RADIANS. *Pect. testâ suborbiculari, inæquilaterali, subdepressâ; fulvâ, rubido- aut violaceo-fusco lateraliter zonatim tinctâ, epidermide pilosâ prope marginem indutâ; radiatim costatâ, costis tenuibus, interdum subobsoletis, longitudinaliter striatis, creberrimis; intus albidâ, prope marginem vividè purpureo-violaceâ.*

THE RADIATING PECTUNCULUS. Shell orbicularly ovate, inequilateral, somewhat depressed; yellowish brown, stained at the side in a more or less zoned manner with reddish or violet-brown, covered near the margin with a hairy epidermis; radiately ribbed, ribs thin, sometimes rather obsolete, longitudinally striated, very close-set; interior white, deep purple-violet near the margin.

LAMARCK, Anim. sans vert. (Deshayes' edit.), vol. vi. p. 495.

Hab. Port Philip, Port Lincoln, South Australia.

Having lately received specimens of this very pretty shell from the locality above-mentioned, I have much pleasure in being enabled to illustrate an unfigured species of Lamarck, which I had almost despaired of identifying.

Species 51. (Mus. Burt.)

PECTUNCULUS LIVIDUS. *Pect. testâ orbiculari, tumidâ, inæquilaterali, anticè angulatâ; longitudinaliter radiatâ, radiis latis, elevatiusculis, subtilissimè striatis, rubido-fuscis, marginem versus livido-cæsiis, epidermide pilosâ plus minusve indutis; radiis anticis creberrimis; umbonibus rectè incurvis, maculis albidis perpaucis circumsparsis; intus albâ, medio purpureo-nigricante tinctâ et maculatâ.*

THE LIVID PECTUNCULUS. Shell orbicular, swollen, inequilateral, angulated on the anterior side; longitudinally rayed, rays broad, rather elevated, very finely striated, reddish brown, livid-blue towards the margin, more or less covered with a soft hairy epidermis; anterior rays very closely set; umbones straightly incurved, a very few white specks scattered around; interior white, middle very deeply stained and spotted with purple-black.

REEVE, Pro. Zool. Soc., 1843.

Hab. Red Sea.

The general outline of this fine species is exactly the same as that of a worn discoloured shell figured in Chenu's 'Recueil de Coquilles' in illustration of the *Pectunculus undulatus* of Lamarck, a species which I cannot identify; its detail of character is however quite at variance with the description. "The longitudinal grooves of the *P. undulatus*," says Lamarck, "are very apparent," whilst this shell, which is in the finest possible condition, cannot be said to be grooved at all, the elevated rays are so superficial. There is also no indication of any waved spots on the body of the shell, nor of any streaks on either side of the ligamentary area; the rays are moreover characterized by a particular style of grey livid painting, which is unquestionably of great specific importance.

Species 52. (Mus. Cuming.)

PECTUNCULUS DELESSERTII. *Pect. testâ orbiculari, tumidiusculâ, subsolidâ, inæquilaterali, altitudine longitudinem æquante; radiatim sulcatâ, sulcis numerosis, profundis, subtilissimè striatis, liris intermediis subtilissimè granuloso-corrugatis, longitudinaliter incisis; albâ, fasciis pluribus aurantio-brunneis transversim undatâ, intervallis fusco lineato-punctatis; intus albâ, anticè rubido-purpureo tinctâ.*

DELESSERT'S PECTUNCULUS. Shell orbicular, somewhat swollen, rather solid, inequilateral, height equal to length; radiately grooved, grooves numerous, deep, and very finely striated, intermediate ridges very finely granulously wrinkled, and longitudinally cut or engraved; white, transversely painted with several waved orange-brown bands, the spaces between which are punctured with short lines and dots of the same colour; interior white, stained anteriorly with light reddish purple.

REEVE, Pro. Zool. Soc., 1843.

Hab. —— ?

I have named this beautiful shell, at the desire of Mr. Cuming, after the very highly-respected individual to whom he is indebted for it; though it is not without feeling some degree of compunction that the peculiarities above-noted may be merely certain modified conditions of the *Pectunculus assimilis*. It is true that the shell is rounder and more swollen, and consequently without that angular attenuation which throws the umbones into an oblique direction and contracts the ligamentary area in the *P. assimilis*; there are moreover nine or ten well-developed ridges in the shell under consideration, whilst in that under comparison there are not more than five or six, and the internal marginal denticulations are consequently narrower and more numerous. Future discoveries can alone decide whether these are constant differences or casual modifications.

Species 19. (Fig. 19 *b*, Mus. Cuming.)
(Second notice.)

PECTUNCULUS ROSEUS.

It is with much satisfaction I am enabled to confirm the value of a new species introduced in Plate IV. under the above title, and which I thought might possibly be the young of the *P. laticostatus*. The specimen here represented is a fine adult example of the small odd valve figured at Pl. IV. fig. 19. I do not see any character to add to those given in the description.

PECTUNCULUS.

[*Temporary Index.*]

	Plate	Species
angulatus, *Lamarck*	VI.	30
assimilis, *Sowerby*	IV.	15
aurifluus, *Reeve*	IV.	17
bicolor, *Reeve*	V.	20
cancellatus, *Reeve*	VII.	39
castaneus, *Lamarck*	VI.	32
Delessertii, *Reeve*	IX.	52
flammeus, *Reeve*	II.	7
formosus, *Reeve*	VIII.	48
giganteus, *Reeve*	I.	3
glycimeris, *Turton*	III.	12
holosericus, *Reeve*	IV.	18
inæqualis, *Sowerby*	IV.	16
intermedius, *Broderip*	I.	1
laticostatus, *Quoy*	II.	8
lineatus, *Reeve*	V.	25
longior, *Sowerby*	III.	10
maculatus, *Broderip*	I.	4
marmoratus, *Chemnitz*	VII.	43
marmoratus, Lamarck	III.	13
morum, *Reeve*	VII.	40
multicostatus, *Sowerby*	V.	26
multistriatus, *Deshayes*	VII.	42
nodosus, *Reeve*	V.	22
obliquus, *Reeve*	VI.	33
oculatus, *Reeve*	VII.	38
ovatus, *Broderip*	I.	2

	Plate	Species
pallium, *Reeve*	V.	21
parcipictus, *Reeve*	IV.	14
Pectenoides, *Deshayes*	VIII.	44
pectinatus, *Lamarck*	VI.	28
Pectiniformis, *Lamarck*	III.	11
pennaceus, *Lamarck*	V.	24
perdix, *Reeve*	VIII.	46
pertusus, *Reeve*	VII.	37
pilosus, *Lamarck*	III.	13
radians, *Lamarck*	IX.	50
roseus, *Reeve*	IV. & IX.	19
rubens, *Lamarck*	V.	23
scriptus, *Lamarck*	II.	6
sericatus, *Reeve*	IX.	49
Siculus, *Reeve*	VII.	41
spadiceus, *Reeve*	VIII.	47
spurcus, *Reeve*	VII.	36
stellatus, *Lamarck*	II.	5
striatularis, *Lamarck*	VI.	27
strigilatus, *Sowerby*	VI.	31
Tellinæformis, *Reeve*	VI.	34
tenuicostatus, *Reeve*	VI.	35
tessellatus, *Sowerby*	VI.	29
undulatus, *Lamarck*	IX.	51
violascens, *Lamarck*	II. & IX.	9
vitreus, *Lamarck*	VIII.	45
zonalis, Lamarck	IX.	9

MONOGRAPH

OF THE GENUS

C A R D I T A.

"Unspeakable desire to see, and know
All these his wondrous works."—*Milton.*

1

2

3

4

5a

6

5b

Sowerby del.

Reeve lith.

CARDITA.

PLATE I.

Genus CARDITA, Bruguière.

Testa æquivalvis, valdè inæquilateralis, vel elongata, vel orbicularis, costis ab umbonibus ad marginem divergentibus, margine sæpissimè crenulato. Cardo dentibus in valvâ alterâ duobus obliquis, altero elongato, crasso, altero subrecto, breviusculo; in alterâ dente unico elongato, crasso, obliquo. Pallii impressio muscularis integra. Ligamentum externum.

Shell equivalve, very inequilateral, either long or orbicular, with ribs radiately diverging from the umbones to the margin, which is, with rare exception, crenulated. Hinge: in one valve are two oblique teeth, one of which is thick and elongated in proportion to the length of the shell, whilst the other is straight, and rather short; in the other valve is a single oblique elongated tooth. Muscular impression of the mantle entire. Ligament external.

The genus Cardita was introduced by Bruguière in the 'Encyclopédie Méthodique' for the purpose of distinguishing all the *Chamæ* of his great predecessor, whose shells are of regular growth and live free or unattached. This seemingly natural group was still however susceptible of division; Lamarck distributed it into the following genera, *Isocardia, Cypricardia, Cardita* and *Venericardia,* and it is the two last of these united under the common title of *Cardita* that I have now to illustrate.

The first peculiarity that invites attention, both in the *Carditæ* and *Cypricardiæ,* as distinguished from the beautiful cordiform symmetry of the *Isocardiæ,* is the great dissimilitude between the anterior and posterior portions of the shell, the former being remarkably short and contracted, whilst the latter is always more or less elongated or rounded. The *Carditæ* are rather numerous in species, and exhibit all the modifications of growth between the narrow elongated form of the *C. pectunculus* and the globose orbicular proportion of the *C. Cuvieri*; the *Cypricardiæ* are inconsiderable in number, and mostly elongated.

It may be as well perhaps to consider the characters by which these genera differ from each other. The *Carditæ* have two simple, thick, oblique teeth in one valve, one of which, varying in length according to the elongated proportion of the shell, interlocks with a single oblique plait in the opposite valve. The dentition of the *Cypricardiæ,* on the other hand, is of a more complicated character, there being three cardinal teeth just below the umbone in each valve, together with a long flexuous lateral tooth. The shells of these genera seem to differ moreover both in colour and chemical composition, and Deshayes anticipates a difference in the animals of sufficient importance in his estimation to warrant their being arranged in separate families. The *Carditæ* have the lobes of the mantle entirely disunited, as in the *Uniones,* whilst in the *Cypricardiæ,* he has every reason to believe, they are joined posteriorly as in the *Cardia.*

Species 1. (Mus. Cuming.)

CARDITA CALYCULATA. *Card. testâ oblongâ, albidâ; latere postico sinuato; costis octodecim, subtilissimè imbricato-squamosis, costarum interstitiis lineatis, non crenatis; margine obsoletè plicato.*

THE BUD-SHAPED CARDITA. Shell oblong, whitish, posterior side sinuated; ribs eighteen in number, each covered with a row of very finely imbricated scales; lateral tooth rather sharp; margin obsoletely plaited.

BRUGUIÈRE, Enc. Méth. vers, p. 408.

Chama calyculata, Linnæus.

Cardita sinuata ?, Lamarck.

Hab. Mediterranean.

This and the *C. variegata* appear to have been confounded together by Linnæus, Born, Chemnitz, and all the early writers under the common title of *C. calyculata.* Bruguière was the first to note the important difference that exists between these species: he set apart the shell described above under the old specific title of *calyculata,* and applied a new name, *variegata,* to the other. This order was however reversed by Lamarck; the latter species was described by that conchologist under the name of *C. calyculata,* and the error has been incautiously perpetuated both by Sowerby and myself; by Sowerby in 'The Genera of Recent and Fossil Shells,' and by myself in the 'Conchologia Systematica.' The ribs in this species are fewer in number; the scales which surmount them are much more numerous, smaller, and more finely imbricated; the interstices between the ribs are wider and not crenulated; and the shell is of one uniform pale yellowish-white colour, with little or no indication of any dark spots.

Species 2. (Mus. Cuming.)

Cardita radula. *Card. testâ subquadrato-oblongâ, albidâ, depressâ, costis tribus et viginti, rubido-fuscis, imbricato-squamosis, squamis fornicatis, semi-erectis, subacutis; costarum interstitiis crenulatis; margine crenato.*

The rasp Cardita. Shell somewhat squarely oblong, whitish, depressed, ribs three-and-twenty in number, covered with rather sharp, half-raised vaulted scales; interstices between the ribs crenulated; margin crenated.

Reeve, Pro. Zool. Soc., 1843.

Hab. —— ?

There are two or three more ribs in this shell than in the following; the dark spots are more numerous, of a reddish instead of a bluish brown, and not of that peculiar half-moon shape, and the scales are more vaulted and erect.

Species 3. (Mus. Cuming.)

Cardita variegata. *Card. testâ oblongâ, gibbâ, albâ, maculis cæruleo-fuscis lunatis pictâ; costis una et viginti, imbricato-squamosis, squamis fornicatis, incumbentibus; costarum interstitiis crenulatis; margine valdè crenato.*

The variegated Cardita. Shell oblong, gibbous, white, painted with bluish-brown half-moon-shaped spots; ribs twenty-one in number, covered with vaulted scales lying one upon the other, interstices between the ribs crenulated; margin strongly crenated.

Bruguière, Enc. Méth. vers, p. 407. pl. 233, f. 6.

Chama calyculata? Linnæus.

Cardita calyculata, Lamarck.

Hab. Indian and Chinese Seas.

I quite enter into the opinion entertained by Bruguière and Deshayes in regard to this shell not being the true *C. calyculata* of Linnæus.

Species 4. (Mus. Cuming.)

Cardita pectunculus. *Card. testâ elongato-oblongâ, anticè pallidè luteolâ, posticè olivaceo-fuscâ; costis quindecim, anticis versus marginem obsoletis, posticis latioribus, subangulatis; intus albicante, posticè purpureo-fuscescente; margine crenato, interstitiis fusco tinctis.*

The small-comb Cardita. Shell elongately oblong, yellowish anteriorly, olive-brown posteriorly; ribs fifteen in number, anterior ones nearly obsolete towards the margin, posterior wider and rather angular; interior whitish, except at the posterior end, which is rich chocolate-brown; margin crenated, interstices stained with brown.

Bruguière, Enc. Méth. vers, p. 412.

Lister, Conch., pl. 347. f. 185.

Chama pectunculus, Dillwyn.

Hab. Madagascar.

This species, which is the largest and most characteristic of the elongated portion of the *Carditæ*, partakes in great measure of the characters of the *C. radiata* and *affinis*; it has, however, neither the spotted or banded painting of the former, nor the small prickly scales of the latter, and it differs constantly in size and other not less significant characters. Lamarck seems to have omitted mention of this species.

Species 5. (Fig. *a* and *b*, Mus. Cuming.)

Cardita radiata. *Card. testâ elongato-oblongâ, pallidè flavidâ aut roseâ, maculis aut fasciis fuscis variegatâ; costis septemdecim, anticis liris minutis transversim decussatis, posticis rotundatis, costâ dorsali squamiferâ; margine latissimè crenato.*

The radiated Cardita. Shell elongately oblong, pale yellowish or rose-colour, variegated with dark black or brown spots, sometimes ranging obliquely in bands; ribs seventeen in number, anterior ones crossed with minute ridges, posterior rounded, the dorsal rib next the ligamentary pit scaly.

Broderip, Pro. Zool. Soc., 1832.

Hab. Salango, West Columbia, and Panama (found in muddy sand at the depth of from six to twelve fathoms); Cuming.

The specimens of this interesting species collected by Mr. Cuming present a remarkable variation in the form of the posterior extremity. In some (Fig. 5 *a*.) it is much attenuated, in others (Fig. *b*.) it is comparatively broad, whilst both varieties exhibit all other characters in common.

Species 6. (Mus. Cuming.)

Cardita affinis. *Card. testâ subelongato-oblongâ, olivaceo-fuscâ; costis septemdecim, anticis obsoletiusculis, posticis rotundatis, flexuosis, subangulatis, prope umbones muricato-squamosis; intus albicante, posticè purpureo-fusco tinctâ.*

The allied Cardita. Shell rather elongately oblong, dark olive-brown; ribs seventeen in number, anterior ones rather obsolete, posterior rounded, flexuous, somewhat angular, armed near the umbones with prickly scales; interior whitish, stained at the posterior end with dark purple or chocolate-brown.

This species may be easily distinguished by the small prickly scales which appear on the posterior ribs; they appear to be deposited only during the early growth of the shell.

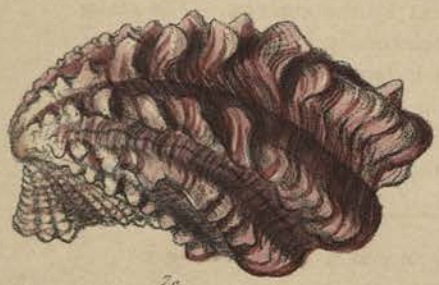
7a

8a

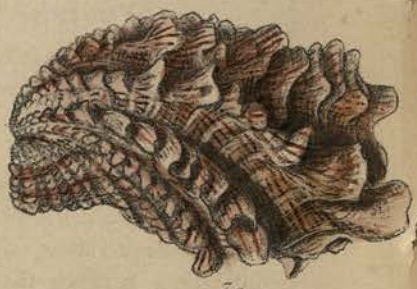
8b

c

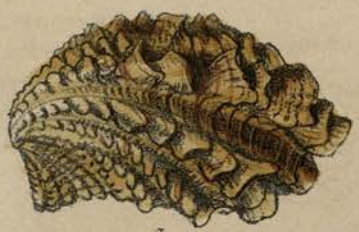
7b



7c



7a



7e

Sowerby del. lith. et pinxt

CARDITA.

PLATE II.

Species 7. (Fig. *a* and *d*, Mus. Cuming; Fig. *b*, *c* and *e*, Mus. Stainforth.)

CARDITA CRASSICOSTATA. *Card. testâ elongatâ, anticè brevissimâ, coarctatâ, albicante, incarnato-tinctâ, cæruleo- aut rubido-fusco pallidè nebulosâ, lineis spadiceis undatis ornatâ; costatâ, costis undecim, tribus majoribus, crassis, imbricato-squamosis, squamis flexuosis obtusis, nunc erectis, nunc incumbentibus, squamis superioribus erectioribus.*

THE THICK-RIBBED CARDITA. Shell elongated, very short and contracted anteriorly, whitish stained with flesh-colour and clouded either with blue or reddish-brown, and further ornamented with fine brown zigzag lines; ribbed, ribs eleven in number, three of much larger dimensions than the remainder, thick, imbricately scaled; scales flexuous, obtuse, sometimes erect, sometimes bending over each other, the superior scales always the most erect.

LAMARCK, Anim. sans vert., vol. vi. (Deshayes' edit.) p. 430.

Testa fossilis. *Cardita crassa*, Lamarck.

Testa juvenis (Fig. 7 *a.*) *subdepressa, squamis regularibus.*
Shell in young state, rather depressed; scales regular.

Testa senior (Fig. 7 *b* and *d.*) *gibbosa, plus minusve arcuatim contracta; squamis crassis, irregularibus.*
Shell in a more advanced state, gibbous, more or less arcuately contracted; scales thick and irregular.

Hab. Putao, Island of Luzon, Philippines (found in coarse sand at the depth of six fathoms); Cuming.

Variety β. (Fig. 7 *c.*)

Testa rosea, lineis undatis indistinctis.
Shell rose-colour, zigzag lines indistinct.

Variety γ. (Fig. 7 *e.*)

Testa crocea, lineis undatis quoque indistinctis, costarum interstitiis subolivaceo-fuscis.
Shell rich saffron-yellow, zigzag lines indistinct also, interstices between the ribs faintly stained with olive-brown.

Variety δ. (Pl. 3. Fig. 7 *f*, Mus. Cuming.)

Testa costis squamisque albis, costarum interstitiis olivaceo-fuscis.
Shell with ribs and scales white, interstices between the ribs olive-brown.

Cardita Tridacnoides, Menke.

Hab. New Holland.

This beautiful species of Cardita varies so exceedingly in growth and distribution of colour, that it requires a large series of specimens to establish the complete specific connection of the varieties above noted.

Variety α. The normal variety is exceedingly well characterized by the small zigzag lines which cross the interstices between the ribs and the spacious diamond-shape lunule between the superior rib of each valve when the shell is closed, as shown at Fig. 7 *b.*

Variety β. The entire shell is of a deep rose-colour; the zigzag lines become indistinct, and the interstices between the ribs exhibit some indication of a faint longitudinal streak of olivaceous-brown.

Variety γ. The rose-colour which distinguishes the preceding variety is exchanged in this for a bright saffron-yellow. A few zigzag lines are scattered here and there upon the shell, the olivaceous intercostal streak becomes more conspicuous, and the scales larger and more like those of a small Tridacna.

Variety δ. I am not surprised to find that this beautiful miniature Tridacna-like variety has been described as a new species; M. Menke lacked the beautiful series of specimens it has been my fortune to examine to discover its identity. There is no indication of colour in any part of this shell, except in the olivaceous longitudinal streak between the ribs, which is here dark, and especially prominent by the contrast. The scales are large and very symmetrically furbelowed.

The specimens which have furnished me with the above remarks are in the collections of Messrs. Cuming, Stainforth, Metcalfe, Deshayes, Petit, Delessert; the British Museum, and the Museum, Jardin des Plantes.

Species 8. (Fig. *a* and *b*, Mus. Cuming.)

CARDITA PICA. *Card. testâ elongato-ovatâ, gibbâ, albâ, nigro aut fusco variè inquinatâ; costis septemdecim sedecimve, in medio angulatis, subtiliter squamosis; intus albâ, posticè nigerrimo-fuscâ.*

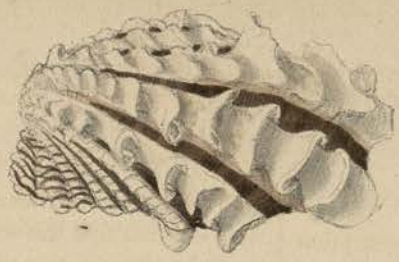
THE PIED CARDITA. Shell elongately ovate, gibbous, white, variously daubed or blotched with black or

brown; ribs sixteen or seventeen in number, angular in the middle, a little scaly; interior white, blackish-brown posteriorly.

Reeve, Pro. Zool. Soc., 1843.

Hab. Island of Guimaras, Philippines (found under stones at low water); Cuming.

There is a peculiarity in the shape and blotching of this shell which entitles it to be distinguished as a new species. Several specimens were collected by Mr. Cuming at the above-mentioned island, singularly agreeing in respect to these characters.



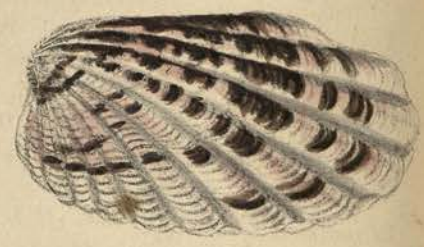
7f

9b

9a

10

11a



12

11b

CARDITA.

PLATE III.

Species 7. (Fig. 7 *f*, Mus. Cuming.)

CARDITA CRASSICOSTATA. Variety γ. (for description vide *Cardita*, Pl. II.)

Species 9. (Fig. *a* and *b*, Mus. Cuming.)

CARDITA GUBERNACULUM. *Card. testâ ovato-oblongâ, depressâ, anticè brevissimâ, angustâ, posticè latissimè rotundatâ, subalatâ; brunneâ, luteo purpureoque umbones versus tinctâ; costis plus minusve squamosis, superioribus perpaucis, majoribus, inferioribus angustis numerosis; intùs brunneâ, anticè albicante.*

THE RUDDER CARDITA. Shell ovately oblong, depressed, very short anteriorly, widely rounded and rather wing-shaped posteriorly; brown, stained with purple or yellow towards the umbones; ribs more or less scaly, upper ribs very few and large, lower ribs numerous and narrow; interior brown, white anteriorly.

Variety β. (Fig. 9 *b*.)

Testa alba, fusco vix tincta.

Shell white, scarcely stained with brown.

REEVE, Pro. Zool. Soc., 1843.

Hab. Zanzibar.

This is the nearest allied species to the *C. semi-orbiculata*; the dark variety might indeed be easily mistaken for it, were it not for the scales and peculiar elongation of the ventral portion of the shell.

Species 10. (Mus. Brit.)

CARDITA SEMI-ORBICULATA. *Card. testâ oblongo-ovatâ, anticè brevissimâ, posticè latiore compressâ, liris exilibus noduliferis ab umbonibus undatim divergentibus, totaliter tectâ; rubido- et nigerrimo-fuscâ, anticè albâ.*

THE SEMI-ORBICULAR CARDITA. Shell oblong-ovate, very short anteriorly, wide and compressed posteteriorly, entirely covered with very fine nodulous ridges, diverging in rather a waved manner from the umbones; reddish and blackish brown, white anteriorly.

BRUGUIÈRE, Enc. Méth. vers, vol. i. part 2. p. 410.

Chama semi-orbiculata, Linnæus.

Chama phrenitica, Born, Chemnitz.

Cardita phrenitica, Lamarck.

Hab. Islands of Mindoro and Ticao, Philippines (under stones at low water); Cuming.

Neither Born, Chemnitz nor Lamarck appears to have been satisfied that this well-known shell, which they described under the title of *C. phrenitica*, is the *Chama orbiculata* of Linnæus. Bruguière, however, was of a different opinion; "il est très-vraisemblable," says that author, "que c'est ici la coquille que Linné a décrit, sous le nom de *Chama orbiculata*, et qui n'a point été reconnue pour telle par les auteurs, quoique sa déscription aie été faite avec assez d'exactitude, sans doute, parceque ce naturaliste n'avoit point cité de figures." And Deshayes, in his new edition of Lamarck's 'Animaux sans vertèbres,' vol. vi. p. 430, note, says, "La déscription que Linné donne, dans le Muséum de la Princesse Ulrique, de la *Chama semi-orbiculata* est telle que l'on ne peut douter qu'elle soit exactement la même que celle-ci; il conviendra donc de lui restituer son nom Linnéen."

Species 11. (Fig. *a* and *b*, Mus. Cuming.)

CARDITA INCRASSATA. *Card. testâ oblongâ, elliptico-ovatâ, anticè brevi, turgidâ, albicante, fusco umbones versus obscurè maculatâ, epidermide luteo-fuscescente tenui indutâ; costis quindecim sedecimve, incrassatis, rotundatis, latescentibus, arcuatim radiantibus; anticis plus minusve crenatis, interdum subnodulosis; intus albâ.*

THE THICKENED CARDITA. Shell oblong, elliptically ovate, short anteriorly, swollen, whitish, obscurely spotted towards the umbones with pale brown, and covered with a thin yellowish-brown epidermis; ribs fifteen or sixteen in number, thickened, rounded, increasing gradually in width, and radiating in a curved direction; anterior ribs more or less crenated, sometimes slightly nodulous; interior white.

SOWERBY, App. Tank. Cat., p. v.

Chama incrassata, Wood (Ind. Test. Supp.).

Variety β.

Testa pallidè carnea aut fulva; costis purpureo-roseis, rubido maculatis et variegatis.

Shell pale flesh-colour or yellowish; ribs rose-tinted, spotted and variegated with ruddy blotches.

Cardita rubicunda, Menke (Moll. Nov. Holl.).

Hab. New Holland.

I have the best authority for stating that the shell

here represented is the true *Cardita incrassata* of Sowerby. Conrad appears to have figured an ordinary specimen of the *Cardita antiquata* for it (American Marine Conchology, pl. 8. p. 39); that shell cannot however be described as being "oblong," and this may still have been one of the species referred twenty years since to the *Chama antiquata*.

Species 12. (Mus. Cuming.)

Cardita marmorea. *Card. testâ elliptico-ovatâ, posticè rotundatâ, anticè peculiariter brevi; lacteâ, nigro umbones versus maculatâ; costis quindecim sedecimve, recto-elongatiusculè radiantibus, latescentibus; anticis crenatis, intus eburneâ.*

The marble-like Cardita. Shell elliptically ovate, rounded posteriorly, peculiarly short anteriorly; milk-white, spotted or rather blotched towards the umbones with black; ribs fifteen or sixteen in number, increasing gradually in width and radiating in a rather straightly elongated direction; anterior ribs crenated, interior white as ivory.

Reeve, Pro. Zool. Soc., 1843.

Hab. New Holland.

This shell may be recognised by its peculiarly narrow elongated form, the ligamental area describing a complete angle with the anterior; the ribs do not radiate from the umbones in a curved direction as in the preceding species, but nearly straight.

13

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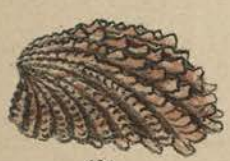
19a



19b

20

21

Sowerby fecit.

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

CARDITA.

PLATE IV.

Species 13. (Mus. Cuming.)

CARDITA DISTORTA. *Card. testâ elongato-ovatâ, valdè gibbosâ, peculiariter distortâ, luteolâ; costis duodecim aut plurimis, subsquamosis, inferioribus planiusculis.*

THE DISTORTED CARDITA. Shell elongately oval, very gibbous, peculiarly distorted, yellowish; ribs twelve or more in number, a little scaly, lower ribs rather flat.

REEVE, Pro. Zool. Soc., 1843.

Hab. Red Sea; Rüppell.

There are several specimens of this curious species in Mr. Cuming's collection, all singularly distorted in the same manner.

Species 14. (Mus. Metcalfe.)

CARDITA SQUAMIGERA. *Card. testâ ovato-rotundatâ, subobliquè cordatâ, fulvâ, roseo tinctâ; costis octodecim elevatis, squamosis; squamis prælongis, suberectis, anticis brevioribus; lunulâ cordiformi, planulatâ.*

THE SCALY CARDITA. Shell ovately rounded, rather obliquely heart-shaped, yellowish-brown, stained with rose-colour; ribs eighteen in number, elevated, scaly; scales very long, rather erect, anterior ones the shorter; lunule flat and heart-shaped.

DESHAYES, Mag. de Zool., 1831, pl. 10.

Hab. ——?

A small species, remarkable on account of the length and multiplicity of the scales.

Species 15. (Mus. Cuming.)

CARDITA TRAPEZIA. *Card. testâ trapeziâ, albidâ, nigro sparsim maculatâ; costis octodecim, subtiliter crenulatis; lunulâ subamplâ; ligamenti areâ depressoplanâ.*

THE TRAPEZIFORM CARDITA. Shell trapeziform, whitish, sparingly spotted with black; ribs eighteen in number, finely crenulated; lunule rather large; ligamentary area depressly flat.

BRUGUIÈRE, Enc. Méth. vers, vol. i. part 2. p. 407.

LAMARCK, Anim. sans vert., vol. vi. p. 429.

Chama trapezia, Müller.

Chama muricata? Poli.

Hab. Coast of Sicily; Philippi.

This little shell may always be recognised by its true trapeziform shape.

Species 16. (Mus. Hanley.)

CARDITA SENEGALENSIS. *Card. testâ oblongâ, elongato-ovatâ, fulvâ, epidermide fuscâ indutâ; costis quindecim sedecimve, squamosis, squamis incumbentibus.*

THE SENEGAL CARDITA. Shell elongately oval, yellowish, covered with a brown epidermis; ribs fifteen or sixteen in number, scaly, scales lying one over the other.

REEVE, Pro. Zool. Soc., 1843.

Le jéson? Adanson.

Hab. Senegal.

This shell, which I know to have been brought from Senegal by M. Rang, approaches nearer to the figure and description of *Le jéson* of Adanson than any that has been hitherto assigned to it.

Species 17. (Mus. Cuming.)

CARDITA ACULEATA. *Card. testâ trapezio-oblongâ, posticè rotundatâ, albâ, rosaceo interdum pallidè tinctâ; costis viginti, compressis, angustis, elevatis, multisquamosis; squamis erectis, aculeiformibus; lunulâ amplâ.*

THE PRICKLY CARDITA. Shell trapeziformly oblong, rounded posteriorly; white, sometimes palely stained with a rose-tint; ribs twenty in number, compressed, narrow, raised and covered with a number of erect prickle-like scales; lunule large.

PHILIPPI, Enum. Moll. Sicil., p. 54. pl. 4. f. 18.

Hab. Mediterranean near Palermo; Philippi.

This is a much more gibbous and solid shell than the *C. squamigera*, to which it is nearly allied, and the spines are more erect and prickle-like. It is generally found with one or more small pieces of the *Cyathina turbinata* (white coral) attached to it.

Species 18. (Mus. Cuming.)

CARDITA MURICATA. *Card. testâ ovato-oblongâ, luteolâ, fusco nigrove maculatâ, epidermide olivaceo-viridi indutâ; costis octodecim, in medio angulatis, muricato-*

squamosis ; posticis magnis, subdistantibus, longitudinaliter striatis, anticis minoribus, approximatis ; latere antico brevissimo.

The sharp-scaled Cardita. Shell ovately oblong, yellowish, spotted with black or brown, and covered with an olive-green epidermis; ribs eighteen in number, angulated in the middle, and furnished with sharp scales; posterior ribs large, rather distant and longitudinally striated, anterior smaller and approximating; anterior side of the shell very short.

Sowerby, Pro. Zool. Soc., 1832.

Hab. Islands of the Pacific Ocean (found attached to and under stones on the beach of Crescent and Rapa Islands); Cuming.

This species, which was described originally by Mr. Sowerby from very rubbed specimens, is peculiar in having the ribs angulated down the middle.

Species 19. (Fig. *a*, Mus. Stainforth; Fig. *b*, Mus. Cuming.)

Cardita rufescens. *Card. testâ elongato-ovatâ, anticè brevissimâ, fulvo-rufescente, epidermide olivaceâ indutâ; costis septemdecim vel octodecim, imbricato-squamosis, squamis incumbentibus.*

The red Cardita. Shell elongately oval, very short anteriorly, yellowish bright red, covered with an olive epidermis; ribs seventeen or eighteen in number, imbricately scaled, scales lying one over the other.

Lamarck, Anim. sans vert. (Deshayes' edit.), vol. vi. p. 431.

Hab. ——?

This and the Senegal shell may prove to be varieties of one and the same species, though I feel scarcely inclined to admit them as such at present.

Species 20. (Mus. Metcalfe.)

Cardita volucris. *Card. testâ elongatâ, posticè valdè gibbosâ, angulatâ, anticè brevi et coarctato-acuminatâ; viridescente albidâ, posticè nigrâ nigroque maculatâ; costis septemdecim, anticis planulatis, marginem versus evanidis; posticis angulatis, hic et illic obsoletè squamosis.*

The flying-bird Cardita. Shell elongated, very gibbous posteriorly, short, and contractedly acuminated anteriorly; greenish-white, posteriorly black and black-spotted; ribs seventeen in number, the anterior ones flat, fading into each other towards the margin; the posterior angulated, and here and there obsoletely scaled.

Reeve, Pro. Zool. Soc., 1843.

Hab. ——?

Care should be taken not to confound this species with the young of the *C. pectunculus*. It is a solid well-developed shell, and never exceeds an inch to an inch and a half in length.

Species 21. (Mus. Metcalfe.)

Cardita gibbosa. *Card. testâ ovato-oblongâ, solidâ, gibbosâ; albâ, costis septemdecim, fusco-variegatis, transversim radiantibus, rotundatis, exiliter nodulosis.*

The gibbous Cardita. Shell ovately oblong, solid, gibbous; white, ribs variegated with brown, seventeen in number, radiating transversely, rounded, and covered with small nodules.

Reeve, Pro. Zool. Soc., 1843.

Hab. ——?

This is a solid gibbous shell, the anterior side of which is not so short as in most of the oblong species of the genus.

22 a

22 b

23

24

25 a

25 b

26

Sowerby fecit

CARDITA.

PLATE V.

Species 22. (Fig. *a* and *b*, Mus. Cuming.)

CARDITA TRIDENTATA. *Card. testâ suborbiculari, subæquilaterali, crassâ, albidâ, roseo tinctâ, epidermide tenui luteolâ indutâ; costis longitudinalibus duabus vel tribus et viginti, liris rudibus subnodulosisconcentricis, interstitiis non penetrantibus, densè ornatis; intus albâ, interdum rosaceo tinctâ.*

THE THREE-TOOTHED CARDITA. Shell rather orbicular, nearly equilateral, thick, whitish, stained with rose-colour and covered with a thin yellowish epidermis; longitudinal ribs two or three and twenty in number, thickly ornamented with rude, rather nodulous, concentric cross ridges which do not penetrate into the interstices; interior of the shell white, sometimes tinged with rose-colour.

SAY, American Conch., No. IV. pl. 40. f. 1 to 5.

Venericardia tridentata, Say, Journ. Acad. Nat. Sci., vol. v. p. 216.

Venericardia australis, Quoy, Voy. de l'Astrolabe, pl. 78. f. 11 to 14.

Hab. Coast of South Carolina; Say. New Zealand; Quoy. Turanga; Dieffenbach.

The rules of nomenclature oblige me to follow the specific name proposed for this shell by Mr. Say, though it may be applied with equal propriety to any species of *Cardita*.

Species 23. (Mus. Cuming.)

CARDITA AJAR. *Card. testâ depresso-cordatâ, cinereo-fuscâ, rubido-fusco et albo variegatâ; costis compressis, angulatis, leviter tuberculatis, interstitiis latiusculis; intùs albidâ, extremitate posticâ fuscescente tinctâ.*

THE AJAR CARDITA. Shell depressly heart-shaped, ashy-brown, variegated with reddish brown and white; ribs compressed, angulated, slightly tuberculated, interstices rather wide; interior whitish, stained at the posterior extremity.

BRUGUIÈRE, Enc. Méth. vers, vol. i. part 2. p. 406.

LAMARCK, Anim. sans vert. (Deshayes' edit.), vol. vii. p. 426.

Le came ajar, Adanson.

Hab. Senegal, Coast of Africa.

This ancient and well-known species may be distinguished by the narrow compressed angular formation of the ribs having the interstices between them particularly clear and open.

Species 24. (Mus. Cuming.)

CARDITA CUVIERI. *Card. testâ crassâ, solidâ, subcordatâ, albido-rosea, rubido-fusco variâ, epidermide corneâ fuscâ indutâ; costis latis, valdè elevatis, complanatis, geniculato-nodosis, lateraliter excavatis; intùs albâ.*

CUVIER'S CARDITA. Shell thick, solid, somewhat heart-shaped, whitish rose-colour, variegated with reddish-brown, and covered with a brown horny epidermis; ribs broad, very elevated, composed as it were of jointed knobs, excavated at the sides; interior white.

BRODERIP, Pro. Zool. Soc., 1832.

Hab. Bay of Fonseca, Central America (dredged from sandy mud in eleven fathoms water); Cuming. Acapulco; Hinds.

It is related by Mr. Broderip, that "after the capture of this fine shell, far exceeding in size and beauty any species of *Cardita* hitherto discovered, the dredge was kept at work for some hours, but no other specimen could be procured. The ribs are broad, flattened on their superior surface, but very elevated and strongly geniculated, the geniculations being for the most part three-tenths of an inch from each other. The shell is a very striking object, and exhibits almost the appearance of carved work."

Three specimens of the *Cardita Cuvieri*, in different stages of growth, have been lately brought from Acapulco by Mr. Hinds of H.M.S. *Sulphur*, just ten years after the above account was written.

Species 25. (Fig. *a* & *b*, Mus. Cuming.)

CARDITA VARIA. *Card. testâ solidâ, subtrigonâ, anticè depresso-cordatâ; costis depressis, obsoletè nodosis; violaceo-spadiceâ, maculis albis variâ, epidermide luteo-fuscescente indutâ; intùs albâ.*

THE SPECKLED CARDITA. Shell solid, somewhat triangular, depressly heart-shaped; ribs depressed, obsoletely knobbed; violet-chestnut colour, speckled with white and covered with a yellowish-brown epidermis; interior white.

Broderip, Pro. Zool. Soc., 1832.

Hab. Gallapagos Islands (dredged in fine sand at the depth of six fathoms); Cuming.

This is a very interesting species; the ribs are very prettily variegated with white and yellowish or violet-brown, and the ligamentary area on the posterior side of the shell is vividly marked with cross zebra-like streaks of the same colour.

Species 26. (Mus. Cuming.)

Cardita tumida. *Card. testâ solidâ, subtrigonâ, anticè cordatâ, tumidâ; costis latis, depressis, subindistinctis; carneâ vel fulvâ, maculis purpureis, parvis, spadiceis, posticè variâ, epidermide luteo-fuscâ indutâ; umbonibus incurvis, albis.*

The swollen Cardita. Shell solid, somewhat triangular, heart-shaped anteriorly, swollen; ribs broad, depressed, rather indistinct; yellow or flesh-colour, variegated on the posterior side with small waved purple spots, and covered with a yellowish-brown epidermis; umbones curved inwards, tipped with white.

Broderip, Pro. Zool. Soc., 1832.

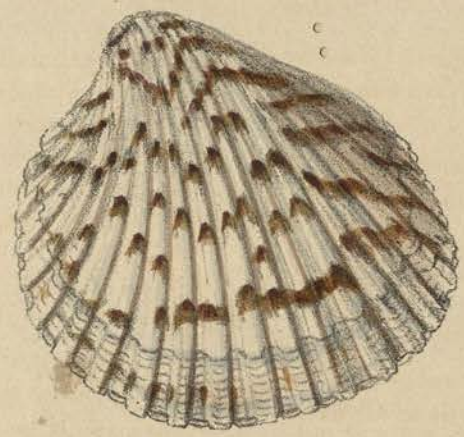
Hab. Puerto Portrero and Isla de Plata, America (found at the former place in a young state at the depth of eleven fathoms in fine sand and gravel, and at the latter place in a full-grown state at the depth of seventeen fathoms in coral sand); Cuming.

This interesting species is very nearly allied to *Isocardia*, by reason of the beautiful incurvature of the umbones; it is however a true Cardita, and may be readily distinguished by its solid structure.

27a

27b

27c



28a

29a

29b

28b

Sowerby fecit.

CARDITA.

PLATE VI.

Species 27. (Fig. 27 *a* and *b*, Mus. Cuming.)

CARDITA NITIDA. *Card. testâ subquadrato-ovali, eburneâ, maculis cæsiis variegatâ; costis duabus vel tribus et viginti, posticis præcipuè crenatis, interstitiis lineis cæsiis angularibus ornatis.*

THE NEAT CARDITA. Shell rather squarely oval, ivory-white, variegated with grey blotches, crenated, especially the posterior ones; interstices between the ribs ornamented with grey angular lines.

REEVE, Pro. Zool. Soc., 1843.

Variety β. (Fig. 27 *b*.)

Testa maculis rubidis.

Shell with the spots reddish.

Hab. Misamis, Isle of Mindanao, Philippines (found in sandy mud at the depth of twenty-five fathoms); Cuming.

This pretty shell is remarkable on account of the posterior ribs being more strongly crenated than the anterior.

Species 28. (Fig. 27 *c*, Mus. Cuming.)

CARDITA OVALIS. *Card. testâ ovatâ, rubido-brunneâ, maculis albis sparsim variegatâ; costis octodecim aut novemdecim, crenatis; posticis lævigatis, interstitiis lineis angularibus ornatis; lunulâ distinctâ.*

THE OVAL CARDITA. Shell ovate, reddish-brown, sparingly variegated with white spots; ribs eighteen or nineteen in number, crenated; posterior ones smooth, interstices between the ribs ornamented with angular lines; lunule distinct.

REEVE, Pro. Zool. Soc., 1843.

Variety β.

Testa alba, maculis cæsiis variegata.

Shell white, variegated with white spots and blotches.

Hab. Isle of Corriegidor, Philippines (found in coarse sand at the depth of seven fathoms); Cuming.

The irregularity which occurs in the number of this species disagreeing with the number of the figure on the Plate, arises from my having considered it as merely a variety of the preceding. Upon comparison and close examination, they were, however, found to differ in several not unimportant particulars; the posterior ribs are smooth, they are altogether fewer in number, the umbones are less incurved, and there is a flat indented lunule beneath them, of which I find no indication in the *C. nitida*.

Species 29. (Fig. 28 *a*, Mus. Stainforth; Fig. 28 *b*, Mus. Cuming.)

CARDITA TANKERVILLII. *Card. testâ depresso-cordatâ, cardiiformi, albicante, fusco umbones versus maculatâ, epidermide fuscescente indutâ; costis quinque aut sex et viginti, planis, obsoletè crenatis, lateraliter compressis; intus albâ.*

LORD TANKERVILLE'S CARDITA. Shell depressly heart-shaped, cardium-like, whitish, spotted towards the umbones with brown, and covered with a light brown epidermis; ribs five or six and twenty in number, flat, obsoletely crenated, compressed at the sides; interior white.

Venericardia Tankervillii, Wood, Ind. Test. Supp., p. 57.

Chama australis, Wood, Ind. Test. Supp., p. 6.

Hab. New Holland; Wood.

I have figured this fine species of Cardita both with and without the epidermis, that the difference in its appearance may not lead to any confusion. It appears to have received the title of *Chama australis* from Mr. Wood to accord with his Linnæan method of arrangement; but in adapting that arrangement to the Lamarckian method, he was obliged to select a new specific name, on account of there being a *Venericardia australis* already published by M. Quoy (vide *Cardita tridentata*, Species 22 of the preceding Plate).

Species 30. (Fig. 29 *a* & *b*, Mus. Cuming.)

CARDITA ANTIQUATA. *Card. testâ obliquè cordatâ, tumidâ, latere postico interdum productiore; albâ, umbones versus rubido-fusco plus minusve maculatâ; costis undâ vel duabus et viginti, angulatis, planiusculis, anticis crenatis, posticis interdum paululùm squamosis; intus albâ.*

THE ANCIENT CARDITA. Shell obliquely heart-shaped, swollen, sometimes produced or extended on the posterior side; white, more or less spotted towards

the umbones with reddish-brown; ribs one or two and twenty in number, angulated, rather flat, anterior ones crenated, posterior sometimes a little scaly; interior white.

Chama antiquata, Linnæus.
Cardita turgida, }
Cardita bicolor, } Lamarck.

Hab. Ceylon.

Having identified the shell here figured with the *Chama antiquata* of Linnæus, by an examination of the very shell described by that illustrious writer in the possession of the Linnæan Society, I restore its ancient title.

The *Cardita antiquata* varies considerably in its general characters; it is more or less produced on the posterior side, as shown by the specimens selected for illustration, the ribs are more or less crenated, and they are more or less flattened in some specimens than in others. They exhibit ample modification of the characters upon which Lamarck founded his two species *C. turgida* and *bicolor*, and cannot be separated with any propriety. I have carefully examined the shells in the Museum at the Jardin des Plantes, alluded to by Deshayes in his notes on these species (vide Lamarck, Anim. sans vert. (new edit.), vol. vi. pp. 427 and 429), and find abundant proof to show that they are specifically the same.

31

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33

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35 a

35 b

36 a

36 b

36 c

36 d

Sowerby fecit.

CARDITA.

PLATE VII.

Species 31. (Mus. Cuming.)

CARDITA LACUNOSA. *Card. testâ subovatâ, radiatim costatâ, costis unâ vel duabus et viginti, elevatis, valdè compressis, subtiliter muricato-squamosis; interstitiis latiusculis, lacunato-excavatis; albâ, areâ posticali nigerrimo-fuscâ.*

THE GUTTERED CARDITA. Shell somewhat oval, radiately ribbed, ribs one or two and twenty in number, elevated, very narrow and compressed, surmounted with fine prickly scales; interstices between the ribs rather wide, and excavated like gutters, as it were; white, posterior area of the shell blackish-brown.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

The prickly scales which surmount the singularly compressed ribs of this shell are placed at equal distances from each other, whilst each rib is in a manner festooned from one scale to the other, like a miniature series of inverted arches.

Species 32. (Mus. Cuming.)

CARDITA SPURCA. *Card. testâ ovatâ, vel oblongo-ovatâ, gibbosâ, albidâ, epidermide olivaceâ, umbones versus plus minusve decorticatâ, indutâ; radiatim costatâ, costis octodecim, eminentibus, nodulosis; latere postico supernè subangulato.*

THE DIRTY CARDITA. Shell ovate or oblong-ovate, gibbous, whitish, covered with a dirty olivaceous epidermis, more or less decorticated towards the umbones; radiately ribbed, ribs eighteen in number, strongly developed, nodulous; posterior side of the shell slightly angulated.

SOWERBY, Pro. Zool. Soc., 1832.

Hab. Iquiqui, Coast of Peru (dredged from coarse sand and gravel at the depth of from six to ten fathoms).

This species varies considerably in form, some specimens being so much more oblong than others; and the ribs in like manner are broader or more spread.

Species 33. (Mus. Metcalfe.)

CARDITA BOREALIS. *Card. testâ suborbiculari, depressiusculâ, albidâ, epidermide crassâ, olivaceâ, umbones versus paululùm decorticatâ, indutâ; radiatim costatâ, costis octodecim, nunc angustis, compressis, nunc depresso-convexis, rugosis vel obsoletè nodulosis.*

THE NORTHERN CARDITA. Shell nearly orbicular, rather depressed, whitish, covered with a thick olivaceous epidermis a little decorticated towards the umbones; radiately ribbed, ribs eighteen in number, sometimes narrow and compressed, sometimes depressly convex and spread, wrinkled or obsoletely nodulous.

Venericardia borealis, Conrad, Amer. Mar. Conch., No. 3. pl. 8. f. 1.

Hab. Coast of Massachusetts, North America (found by Dr. Pickering); Conrad.

The *Carditæ spurca* and *borealis* seem to present remarkable modifications of the same characters, and if a more extended series of specimens should prove them to be varieties of one and the same species, Conrad's name should be preserved, as having the priority of a few months over that of Mr. Sowerby. I publish the two species as I find them, as I cannot verify my suspicions. The *Cardita borealis* may be described as being rounder and more depressed than the *C. spurca*, whilst the ribs present but little indication of being nodulous.

Species 34. (Mus. Cuming.)

CARDITA CRASSA. *Card. testâ subquadrato-ovali, gibbosissimâ, anticè brevissimâ; albâ, maculis rubido-fuscis perpaucis prope umbones ornatâ, epidermide luteo-fuscâ indutâ; radiatim costatâ, costis rotundis, latiusculis, umbones versus subtilissimè geniculatis, lateribus hic et illic indistinctè serratis, interstitiis perangustis; intus albâ, margine irregulariter undulato.*

THE THICK CARDITA. Shell somewhat squarely oval, extremely gibbous, anteriorly very short; white, ornamented with a few scattered reddish-brown spots near the umbones, and covered with a yellowish-brown epidermis; radiately ribbed, ribs round, rather broad, and very finely geniculated towards the umbones, sides of the ribs here and there indistinctly serrated, interstices between the ribs very narrow; interior of the shell white, margin irregularly undulated.

GRAY, Zool. Beechey's Voy., p. 152. pl. 42. f. 4.

Hab. Acapulco; Beechey.

The *Cardita crassa* is remarkable for its very gibbous

swollen formation, and differs materially in this respect from any other species.

Species 35. (Mus. Cuming.)

Cardita sulcata. *Card. testâ rotundato-cordiformi, radiatim costatâ; costis rotundis, granuloso-serratis, interstitiis perangustis; albidâ, costis lineis fuscis sparsis, obliquè transversis, aurantio-roseo infrà inquinatis, vividè pictis; epidermide luteo-fuscâ; intus albâ.*

The grooved Cardita. Shell rotundately heart-shaped, radiately ribbed; ribs round, granulously serrated, interstices very narrow; whitish, ribs vividly painted with obliquely transverse dark brown lines, each of which is daubed underneath with pale brown or orange-rose; epidermis yellowish-brown; interior of the shell white.

Lamarck, Anim. sans vert. (Deshayes' edit.), vol. vi. p. 406.

Sowerby, Genera of Shells, Card., f. 3.

Chama antiquata, Poli (not Linnæus).

Venericardia sulcata, Payrandeau.

Hab. Mediterranean.

The *Carditæ sulcata* and *antiquata* have been so confounded together by authors that it is extremely difficult to arrange the synonyma; an examination of the identical shell described by Linnæus under the latter title (in the Museum of the Linnean Society), enables me however to certify that the *Chama antiquata* of Linnæus is not the *Chama antiquata* of Poli; for further account of which see the preceding Plate, Sp. 30.

Species 36. (Fig. *a, b, c* & *d*, Mus. Cuming.)

Cardita laticostata. *Card. testâ ovato-rhombeâ, turgidâ, latere postico elevatiusculo; luteo- vel cæruleo-albâ, fasciis brunneis aut nigricantibus, latis, undatis, longitudinaliter pictâ; radiatim costatâ, costis lineis elevatis frequentibus decussatis; epidermide fulvescente.*

The broad-ribbed Cardita. Shell ovately rhomboidal, swollen, posterior side rather elevated; yellowish or bluish-white, longitudinally painted with broad brown or blackish waved bands; radiately ribbed, ribs crossed with numerous strongly raised lines; epidermis yellowish-brown.

Sowerby, Pro. Zool. Soc., 1832.

Variety β. (Fig. 36 *d.*)

Testa latere antico, areâque posticâ vividè aurantio-rubrâ. Shell with the anterior side and posterior ligamentary area bright orange-red.

Cardita tricolor, Sowerby, Pro. Zool. Soc., 1832.

Hab. St. Elena, Panama, Real Llejos, Guayaquil, &c., Central America (found in coarse sand and mud at the depth of from ten to twelve fathoms); Cuming.

This beautiful and distinct species is not uncommon in collections; the longitudinal stripes vary more or less in colour from brown to black, and the sides of the shell are occasionally tinged with orange-red.

37 a

37 b

37 c

38

39

40

41

Sowerby del. et lith.

prd. lith, Linn. imp

CARDITA.

PLATE VIII.

Species 37. (Fig. *a*, *b* and *c*, Mus. Belcher.)

CARDITA ABYSSICOLA. *Card. testâ globoso-cordiformi, valdè gibbosâ; albâ; radiatim multi-costatâ, costis tricenis, angustis, subtilissimè imbricatis, imbricibus numerosis, confertis; lunulâ maximâ, prominente notatâ.*

THE DEEP-DWELLING CARDITA. Shell globosely heart-shaped, very gibbous; white; radiately many-ribbed, ribs thirty in number, narrow and very finely imbricated, imbrications numerous and close-set; lunule very large, and prominently developed.

HINDS, Pro. Zool. Soc., 1843.

Hab. Straits of Malacca (found at the depth of a hundred fathoms); Hinds.

I am much indebted to Mr. Hinds for being allowed to introduce this remarkable shell to the notice of conchologists. It is a very beautifully sculptured species, and especially curious from having been dredged by that indefatigable collector in the Straits of Malacca at the great depth of one hundred fathoms. Another interesting feature in this shell is its close affinity with the fossil *Cardita imbricata*. There is no indication of any colour; it looks exactly as if cut from alabaster, and is in excellent condition, with the ligament fresh and entire.

Species 38. (Mus. Brit.)

CARDITA FLAMMEA. *Card. testâ depresso-cordatâ, crassâ, radiatim costatâ, costis latis, depressis, subobtusis; rubido-lutescente, maculis rubidis triangularibus, flammeis, vividè pictâ, epidermide crassâ indutâ; umbonibus incurvis; lunulâ maximâ, profundâ; intus albâ, margine denticulato.*

THE FLAME-MARKED CARDITA. Shell depressly heart-shaped, thick, radiately ribbed, ribs broad, depressed and rather obtuse; reddish yellow, vividly painted with reddish, triangular, flame-like spots, and covered with a thick epidermis; umbones curved inwards; lunule very large and deep; interior white, margin denticulated.

Venericardia flammea, Michelin, Mag. de Zool., 1830. pl. 6.

Hab. ——?

It is with no little gratification that I now publish a good illustrative figure of a species described thirteen years since by M. Michelin from a worn odd valve. The *Cardita varia* is the nearest allied species to it, but that shell is of smaller dimensions, rounder, and slightly noduled; the painting is also of different character.

Species 39. (Mus. Stainforth.)

CARDITA PREISSII. *Card. testâ trapezio-ovatâ, depressiusculâ; lutescente, fusco variâ et irregulariter zonatâ; radiatim costatâ, costis octodecim; anticis eleganter annulato-crenulatis, posticis squamis fornicatis, erectis, sparsim ornatis.*

PREISS'S CARDITA. Shell trapeziformly ovate, rather depressed; yellowish, variegated and irregularly zoned with brown; radiately ribbed, ribs eighteen in number; anterior ones elegantly crenulated, having the appearance of rings, posterior sparingly adorned with erect, hooked scales.

MENKE, Moll. Nov. Holl., p. 38.

Hab. Western coast of New Holland; Menke.

This is a very pretty species, and the single specimen here figured is the only one I have seen. I was enabled to identify it by means of a very well executed drawing, kindly forwarded to me a few months since by the author, M. Menke of Pyrmont.

Species 40. (Mus. Cuming.)

CARDITA CANALICULATA. *Card. testâ suborbiculatâ, luteolâ, fusco variè zonatâ; radiatim costatâ, costis unâ vel duabus et viginti, lateraliter compressis, annulato-serratis, interstitiis excavato-canaliculatis; intus albidâ, fusco pallidè tinctâ.*

THE CHANNELED CARDITA. Shell nearly orbicular, yellowish, variously zoned with brown; radiately ribbed, ribs one or two and twenty in number, laterally compressed, annulately serrated, interstices excavately channeled; interior whitish, faintly stained with brown.

REEVE, Pro. Zool. Soc., 1843.

Hab. Philippine Islands; Cuming.

The leading features of this species are its rounded form, and the peculiar manner in which the interstices between the ribs are channeled out.

Species 41. (Mus. Brit.)

Cardita angisulcata. *Card. testâ ovatâ, rubido-fusco tinctâ et variegatâ; radiatim costatâ, costis unâ vel duabus et viginti, planis, latiusculis, approximatis, interstitiis angustis, profundè incisis; costis umbones versus annulato-serratis, hic et illic squamiferis, squamis erectis.*

The narrow-grooved Cardita. Shell ovate, stained and variegated with reddish brown; radiately ribbed, ribs one or two and twenty in number, flat, rather broad, and closely approximating, the interstices being narrow and rather deep; ribs annulately serrated towards the umbones, here and there scaly, scales erect.

Reeve, Pro. Zool. Soc., 1843.

This species may be easily recognised by the narrow and deeply-cut interstices between the ribs, which are unusually flat towards the margin.

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

Sowerby, del. et lith.

prel. lith. Linn. imp.

CARDITA.

PLATE IX.

Species 42. (Mus. Cuming.)

CARDITA CONCAMERATA. *Card. testâ ovato-oblongâ, radiatim costatâ, costis nodulosis, subirregularibus; valvis planiusculis, cameră parvâ vel pocillo internè munitis.*

THE CHAMBERED CARDITA. Shell ovately oblong, radiately ribbed, ribs nodulous and rather irregular; valves flattish, furnished internally with a small cup or chamber.

BRUGUIÈRE, Enc. Meth. vers, vol. i. part 2. p. 409. *Chama concamerata,* Chemnitz.

Hab. Cape of Good Hope (found under stones).

The curious internal cup-like structure which is peculiar to this species is formed by a fold of the calcareous lining of the valve, and it has been ascertained by Mr. Sowerby to be destined to contain the ovaries. "The eggs," says that author, "appear to remain in them until they are perfectly developed and ready to disclose the complete animal with its shell."

Species 43. (Mus. Cuming.)

(Figure considerably magnified.)

CARDITA SEMEN. *Card. testâ ovatâ, subcompressâ, tenui, radiatim costatâ, costis plano-convexis; olivaceo-fuscâ.*

THE SEED CARDITA. Shell ovate, somewhat compressed, thin, radiately ribbed, ribs flatly convex; olive-brown.

REEVE, Pro. Zool. Soc., 1843.

Hab. Mexillones, Desert of Atacama, Bolivia (found at the depth of three fathoms); Cuming.

This minute species is the smallest of the genus; it looks like a little radiated seed.

Species 44. (Mus. Cuming.)

CARDITA NODULOSA. *Card. testâ ovatâ, solidâ, radiatim costatâ, costis duabus vel tribus et viginti, compressis, regulariter nodulosis; lutescente-albâ, prope marginem aurantio tinctâ.*

THE NODULOUS CARDITA. Shell ovate, solid, radiately ribbed, ribs two or three and twenty in number, compressed, regularly noduled; yellowish white, stained near the margin with orange.

REEVE, Pro. Zool. Soc., 1843.

Hab. Sicily?

This shell may be recognised by the compressed character of the ribs, and the very regular manner in which they are noduled.

Species 45. (Mus. Cuming.)

(Figure considerably magnified.)

CARDITA NAVIFORMIS. *Card. testâ trapezio-ovatâ, subcompressâ, latere postico elongato-recto; radiatim costatâ, costis paululùm curvatis, squamosis; fuscescente.*

THE BOAT-SHAPED CARDITA. Shell trapeziformly ovate, somewhat compressed, posterior side elongately straight; radiately ribbed, ribs a little curved, scaly; brownish.

REEVE, Pro. Zool. Soc., 1843.

Hab. Valparaiso, South America (dredged from sandy mud at the depth of twenty-five fathoms); Cuming.

The shape of this little species is peculiar, though it approaches in great measure to that of the *C. trapezia.*

Species 46. (Mus. Cuming.)

(Figure considerably magnified.)

CARDITA COMPRESSA. *Card. testâ suborbiculari, solidâ, valdè compressâ, epidermide olivaceâ indutâ; radiatim costatâ, costis lævibus, planiusculis, interstitiis angustis.*

THE COMPRESSED CARDITA. Shell nearly orbicular, solid, very compressed, covered with an olivaceous epidermis; radiately ribbed, ribs smooth, rather flat, interstices between them very narrow.

REEVE, Pro. Zool. Soc., 1843.

Hab. Valparaiso, South America (dredged from coarse sand at the depth of from twenty to sixty fathoms); Cuming.

Several specimens of this little species were found by Mr. Cuming at the great depth above-mentioned; it has the appearance of the *C. borealis* in miniature.

Species 47. (Mus. Cuming.)

(Figure considerably magnified.)

CARDITA FLABELLUM. *Card. testâ flabelliformi, radia-*

tim costatâ, costis leviter serratis; olivaceo-fuscâ.

THE FAN CARDITA. Shell fan-shaped, radiately ribbed, ribs lightly serrated; olive-brown.

REEVE, Pro. Zool. Soc., 1843.

Hab. Valparaiso, South America; Cuming.

The peculiar fan-shape of this minute species distinguishes it in an eminent degree from any hitherto described.

Species 48. (Mus. Cuming.)

(Figure considerably magnified.)

CARDITA TEGULATA. *Card. testâ subflabelliformi, radiatim costatâ, costis decem vel undecim, prominentibus, subtiliter squamulosis.*

THE TILED CARDITA. Shell somewhat fan-shaped, radiately ribbed, ribs ten or eleven in number, prominent, and finely scaled.

REEVE, Pro. Zool. Soc., 1843.

Hab. Valparaiso, South America (dredged from the depth of twenty-five fathoms); Cuming.

The sculpture of this shell reminds one of a tiled roof.

Species 49. (Fig. *a*, *b* and *c*, Mus. Cuming.)

(Figures considerably magnified.)

CARDITA CARDIOIDES. *Card. testâ globosâ, Cardiiformi, radiatim costatâ, costis rotundatis, irregulariter nodulosis, interstitiis subprofundè incisis; albidâ vel aurantiâ, strigis aurantiis latis, transversis, vividè ornatâ.*

THE CARDIUM-LIKE CARDITA. Shell globose, Cardium-shaped, radiately ribbed, ribs rounded, irregularly nodulous, interstices rather deeply cut; whitish or orange, vividly marked across with broad orange streaks.

REEVE, Pro. Zool. Soc., 1843.

Hab. Islands of Corrigidor and Luzon, Philippines (dredged from coarse sand at the depth of seven fathoms); Cuming.

A very pretty, round, solid species, looking more like a *Cardium* externally than a *Cardita.*

Species 50. (Mus. Brit.)

(Figure considerably magnified.)

CARDITA FABULA. *Card. testâ oblongo-ovatâ, latere postico latiore, radiatim costatâ, costis subangulatis; albâ, fusco sparsim maculatâ; intus albâ, posticè fusco-tinctâ.*

THE LITTLE BEAN CARDITA. Shell oblong-ovate, posterior side the wider, radiately ribbed, ribs somewhat angular; white, lightly spotted here and there with brown; interior white, stained with brown at the posterior end.

REEVE, Pro. Zool. Soc., 1843.

Hab. Island of Alboran.

The locality above-mentioned is attached in manuscript to a number of specimens of this little shell in the British Museum from Mr. Broderip's celebrated collection.

CARDITA.

[*Temporary Index.*]

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MONOGRAPH

OF THE GENUS

DELPHINULA.

"Great are thy works, Jehovah! infinite
Thy power! what thought can measure thee, or tongue
Relate thee."—*Milton.*

1a

2

3

1b

4

5

Sowerby del.

Reeve lit

DELPHINULA.

PLATE I.

Genus DELPHINULA, Lamarck.

Testa turbinata, subdiscoidea, anfractibus laxiusculè convolutis, tuberculis vel spinis retusis plerumque ornatis, umbilicum plus minusve amplum formantibus; aperturâ rotundâ, integrâ, margine continuo, reflexo, sæpè fimbriato. Operculum corneum, spirale.

Shell turbinated, nearly discoid, whorls rather loosely convoluted, generally ornamented with blunt spines and tubercles, forming an umbilicus of variable dimension; aperture round, entire; margin continuous, reflected, often frilled. Operculum horny and spiral.

The *Delphinulæ*, among marine shells, may be regarded as the analogues of the *Cyclostomata* among land shells, having a round entire aperture without any indication of a columella. Linnæus referred them to his genus *Turbo*, Chemnitz distinguished them by the common appellation of *Delphinus*, and Lamarck associated them together in a genus, in accordance with the existing form of nomenclature, under the title of *Delphinula*.

Species 1. (Fig. *a* & *b*, Mus. Cuming.)

DELPHINULA IMPERIALIS. *Delph. testâ subdiscoideâ, spiniferâ et squameo-liratâ; anfractibus olivaceo-viridibus, ultimo pallidè purpureo, laxè convolutis, umbilicum amplum formantibus; subangulatis, angulo spinis gracillimis, squamæformibus, nigris, supernè inflexis, coronato; anfractuum parte alterâ spinis brevioribus, contrariè inflexis, in seriebus dispositis, interstitiis squamis nigris, minutis, sigillatim impositis, ornatâ; spirâ depresso-concavâ.*

THE IMPERIAL DELPHINULA. Shell somewhat discoid, ornamented with spines and ridges of scales; whorls olive-green, last whorl pale purple, loosely convoluted, forming a large umbilicus; rather angular, angle surmounted with a row of black, tall, slender, scale-like spines, bending inwards at the top; remaining portion of the whorls adorned with rows of shorter spines bending the contrary way, with rows of minute scales placed one after the other in the interstices; spire depressly concave.

REEVE, Pro. Zool. Soc., 1842.

Delphinula melanacantha, Conch. Syst., vol. ii. pl. 211. f. 4. and pl. 212. f. 10.

Hab. Island of Mindanao, Philippines (found in clefts of rocks and under stones at low water); Cuming.

It requires no very "scrupuleuse observations" to distinguish this shell from either of the species to which it has been at different times referred by M. Kiener; namely, the *D. distorta* and *laciniata*. With the former of these species it is unnecessary to institute a comparison; in comparing it with the latter, it may be well to point attention to the manifest difference between the spiny scale-like protuberances of the *D. imperialis*, and the blunt laciniated appendages of the *D. laciniata*.

After publishing this species in my 'Conchologia Systematica' with the specific title of *melanacantha*, I was reminded that it had been circulated amongst collectors with that of *imperialis*. Though the latter name had appeared only in manuscript, I thought it prudent to adopt it.

Species 2. (Mus. Cuming.)

DELPHINULA FORMOSA. *Delph. testâ rotundâ, subdiscoideâ, levitèr nodiferâ, aureo-ochraceâ, cocceo-tinctâ, anfractibus perangulatis, angulo squamis grandibus, triangularibus, valdè compressis, coronato; anfractuum parte inferiori squamarum minorum seriebus duabus, squamulisque ochraceo-coccineis minutis, in seriebus parallelis, subflexuosis, dispositis, ornatâ; umbilico amplo, purpureo-lacco vividè colorato; spirâ plano-convexâ.*

THE BEAUTIFUL DELPHINULA. Shell round, nearly discoid, slightly knobbed, golden yellow, stained with pinky crimson; whorls sharply angular, angle coronated with a row of large, very compressed scales; lower portion of the whorls ornamented with two rows of smaller scales and numerous minute yellowish crimson scales, arranged in waved parallel rows; umbilicus large, vividly coloured with bright purple lake; spire flatly convex.

Variety β.

(Vide Plate III.)

REEVE, Pro. Zool. Soc., 1842; Conch. Syst., vol. ii. pl. 212. f. 9.

Hab. Island of Capul, Philippines (found under stones on the reefs at low water); Cuming.

The lower portion of the whorls of this beautiful shell

has a peculiarly soft white appearance, and the umbilicus in all the specimens I have seen is coloured with a deep purple lake, without the least tinge of the rich golden yellow which shades the crimson of the upper portion of the whorls.

Species 3. (Mus. Cuming.)

Delphinula aculeata. *Delph. testâ subdiscoideâ, aculeatâ, albidâ; anfractibus perangulatis, angulo spinis squamæformibus flexuosis, dorsim coccineis, coronato, anfractuum parte inferiori spinarum seriebus duabus, aculeolisque squamæformibus in seriebus parallelis dispositis, ornatâ; spirâ depresso-planâ.*

The prickly Delphinula. Shell nearly discoid, prickly, whitish; whorls sharply angular, angle surmounted with a row of flexuous scale-like spines, scarlet-coloured at the back; lower portion of the whorls ornamented with two rows of spines and a number of small scale-like prickles arranged in parallel rows; spire depressly flat.

Variety β.

(Vide Plate III.)

Reeve, Pro. Zool. Soc., 1842; Conch. Syst., vol. ii. pl. 212. f. 8.

Hab. Island of Ticao, Philippines (found under stones on the reefs at low water); Cuming.

The thin flexuous spines which surmount the upper part of the whorls are of very peculiar character; and the scarlet at the back of these spines is the only portion of colour in the shell. The entire surface of the shell, but more particularly within and around the umbilicus, is covered with sharp prickles.

Species 4. (Mus. Cuming.)

Delphinula atrata. *Delph. testâ subdiscoideâ, squamosâ, pallidè purpureâ; anfractibus supernè angulatis, angulo squamis brevibus sublaciniatis atratis coronato, parte inferiori squamis minoribus squamulisque minutissimis aculeatis, in seriebus parallelis dispositis, ornatâ; spirâ depresso-planâ.*

The black-dyed Delphinula. Shell somewhat discoid, pale purple; whorls angulated round the upper part, angle surmounted with short, slightly laciniated black scales; lower portion ornamented with smaller scales, and a number of very small prickly scales arranged in parallel rows; spire depressly flat.

Reeve, Conch. Syst., vol. ii. pl. 212. f. 12.

Delphinus atratus, Chemnitz, Conch., vol. v. pl. 175. f. 1730 and 1731.

Delphinula laciniata (young), Kiener.

Hab. Philippine Islands (found under stones on the reefs at low water); Cuming.

This shell partakes of the characters of the *D. laciniata* and *imperialis*, but it retains a good specific peculiarity in all stages of growth. I do not hesitate to adopt the same distinction that was accorded to it by Chemnitz.

Species 5. (Mus. Cuming.)

Delphinula incisa. *Delph. testâ globoso-discoideâ, liris purpureis angustis, subflexuosis, interstitiis albis, profundè incisis, totaliter tectâ; anfractibus tuberculis grandibus, complicatis, distantibus, in seriebus duabus dispositis, ornatis; aperturâ rotundâ, margine inferiori lacunato; spirâ depresso-planâ.*

The engraved Delphinula. Shell globosely discoid, entirely covered with narrow purple slightly waving ridges, the interstices between which are white and deeply engraved; whorls ornamented with two rows of large distant stunted tubercles; aperture round, lower margin guttered; spire depressly flat.

Reeve, Pro. Zool. Soc., 1843; Conch. Syst., vol. ii. pl. 212. f. 11.

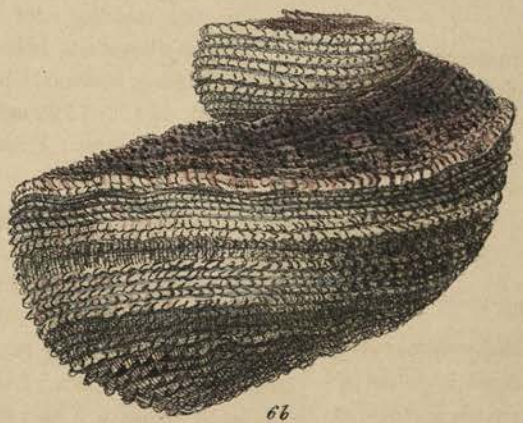
Hab. Port Essington, North Coast of New Holland; Gilbert.

A single specimen only of this new and interesting species was found by Mr. Cuming at the above-mentioned locality; it may be recognised by the pinched stunted growth of the tubercles, and by the interstices of the fine waved purple ridges being very deeply engraved.

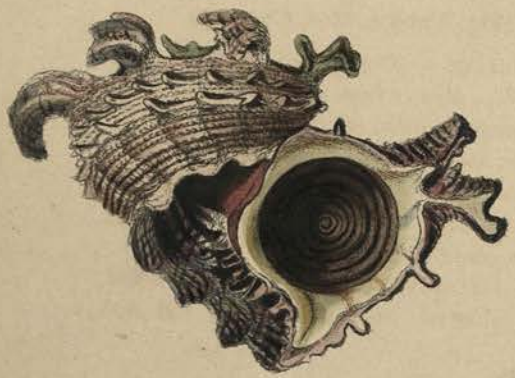
6a

7

8



6b



9a

9b

Sowerby del.

Reeve lith.

DELPHINULA.

PLATE II.

Species 6. (Fig. *a* & *b*, Mus. Cuming.)

DELPHINULA TYRIA. *Delph. testâ subdiscoideâ, squamulosâ, squamulis minutis, seriatim dispositis; anfractibus supernè et infernè purpureis, supernè angulatis, infernè rotundatis, umbilicum lævem lacco-purpureum plus minusve amplum formantibus; spirâ depressoplanâ.*

THE TYRIAN-PURPLE DELPHINULA. Shell somewhat discoid, scaly, scales very small, arranged in parallel rows; whorls above and below purple, upper part angular, lower part rounded, forming a smooth purple-lake umbilicus of greater or less extent; spire depressly flat.

REEVE, Pro. Zool. Soc., 1842; Conch. Syst., vol. ii. pl. 211. f. 1 & 6.

MENKE, Moll. Nov. Holl., p. 16. no. 61.

Hab. Rotten-nest Island, Swan River Settlement, New Holland.

Little need be added to assist the identification of this beautiful shell; it is the only large species of *Delphinula* at present known to be absolutely destitute of spines or nodules, and the silvery-white scales, bordered round the upper and lower portion of the shell with rich purple, render it eminently characteristic.

Species 7. (Mus. Cuming.)

DELPHINULA DISTORTA. *Delph. testâ subdiscoideâ, rubro-purpureâ; anfractibus angulatis, supra angulum irregulariter squameo-liratis et corrugatis, infra squamosis, squamis numerosis, contiguis, suberectis, muricatis, seriatim dispositis; spirâ convexo-planâ.*

THE DISTORTED DELPHINULA. Shell rather discoid, deep reddish purple; whorls angulated, irregularly wrinkled with scale-like ridges above the angle and covered with scales below it, scales numerous, close, rather erect, prickly, and arranged in rows; spire convexly flat.

LAMARCK, Anim. sans vert., vol. vi. p. 231.

Turbo distortus, Linnæus.

Delphinus distortus, Chemnitz.

Hab. Island of Nicobar.

The colour of this shell is a peculiar coral-red; it has no laciniated appendages, and there are no prickly scales above the angle of the whorls; the scales that crown the angle are often of larger size and more depressed than any of the others. It may be as well to notice, that the new specific title of *rugosa*, erroneously attached by Kiener to his figure of this well-known species on the plate, was abandoned on the subsequent publication of the text.

Species 8. (Mus. Cuming.)

DELPHINULA NODOSA. *Delph. testâ discoideâ, albâ, coccineo leviter tinctâ, punctis elevatis, purpureis, in seriebus subdistantibus dispositis, cinctâ; anfractibus rotundis, in medio nodosis, nodis minutis, suprà et infrà nodosis, nodis grandibus; spirâ concavo-depressâ.*

THE KNOBBED DELPHINULA. Shell discoid, white, faintly stained in places with pink, encircled with rather distant rows of dark purple raised dots; whorls round, encircled with a row of small knobs in the middle, and one of very large prominent knobs above and below; spire concavely depressed.

Delphinus nodosus, Chemnitz, Conch., vol. v. p. 160. pl. 174. f. 1723 and 1724.

Hab. Isle of Capul, Philippines (on the reefs at low water); Cuming.

This very interesting shell is one of the many excellent and rare species of Chemnitz that have been neglected by Lamarck. Although four very distinct kinds of Delphinulæ are described and figured in the 'Conchylien Cabinet,' only two were published in the 'Hist. des Anim. sans vert.,' Lamarck's third species (*D. turbinopsis*) being a Cancellaria (*C. trigonostoma*, Sow.). The shell before me is nearly as round and discoid as a Planorbis, and may be recognised as a very characteristic species.

Species 9. (Fig. *a* and *b*, Mus. Cuming.)

DELPHINULA LACINIATA. *Delph. testâ subdiscoideâ, crassâ, carneolâ, rubro et fusco variegatâ; anfractibus squamis minutis liratis, interdum lævioribus; supernè angulatis, angulo appendicibus grandibus curvis, laciniato-ramosis ornato; umbilico amplo, squamis erectis muricatis armato; aperturâ infernè lacunatâ; spirâ depresso-planâ.*

THE LACINIATED DELPHINULA. Shell nearly discoid, thick, flesh-coloured, variegated with red and

brown; whorls ridged with minute scales, often smooth; angular round the upper part, angle decorated with large, curved, laciniately branched appendages; umbilicus large, armed with erect prickly scales; aperture guttered at the lower part; spire depressly flat.

Lamarck, Anim. sans vert.? vol. vi. p. 130.

Turbo delphinus, Linnæus.

Hab. Indian and Chinese Seas: Philippine Islands; Cuming.

This, the normal species of the genus, may be distinguished by its colour and broadly laciniated and branched appendages.

10 a

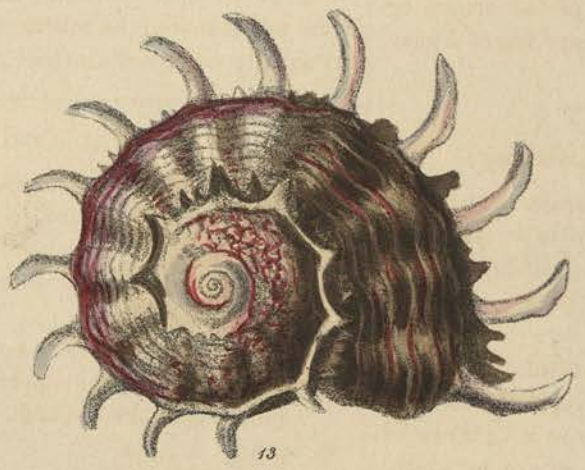
10 b

11 a

11 b

3 b

12 a



13

12 b

14 a

2 b

14 b

Sowerby fecit.

DELPHINULA.

PLATE III.

Species 2. (Fig. 2 *b*, Mus. Cuming.)

DELPHINULA FORMOSA. Variety *β*. *Testa squamulis coccineis, in seriebus parallelis dispositis ubique ornata.* Shell everywhere ornamented with small crimson-scarlet scales, arranged in parallel rows.

This very pretty variety of the *Delphinula formosa* (vide Plate I. Species 2.) is distinguished on account of the rows of small crimson scales which cover its entire surface.

Species 3. (Fig. 3 *b*, Mus. Cuming.)

DELPHINULA ACULEATA. Variety *β*. *Testa supernè lævis.* Shell with the upper portion perfectly smooth.

It is important to observe, that the *Delphinula aculeata* is sometimes destitute of prickles above the tuberculated angle of the whorls. The most striking character of this species appears to be in the deep crimson or scarlet painting which ornaments the back of the spines or tubercles, and it is constant in all the specimens I have seen.

Species 10. (Fig. *a* and *b*, Mus. Cuming.)

DELPHINULA PERONII. *Delph. testâ planulato-rotundatâ, spirâ subdepressâ; peralbâ, foraminibus irregularibus profusè puncturatâ; anfractibus angulato-convexis, supernè varicosis, varicibus obsoletè bicarinatis; aperturæ fauce eximiè margaritaceâ.*

PERON'S DELPHINULA. Shell flatly rounded, spire rather depressed; very white, profusely punctured with irregular small holes, remarkably so with a row of large ones round the umbilicus; whorls angularly convex, surmounted with varices, which are obsoletely double-keeled; interior of the aperture delicately lined with bright salmon-colour pearl.

KIENER, Iconographie, pl. 3. f. 5.

Hab. Islands of St. Peter and St. Francis, New Holland; Peron. Philippine Islands; Cuming.

This is one of that curious group of *Delphinulæ* of which four species are illustrated in the present plate. The *Delphinula Peronii* is curiously punctured over, and looks exactly like some baked preparation of white sugar that I remember to have seen at confectioners. The whorls are strongly varicose, but only on the upper part, and this is a character I would notify as being peculiar to the species.

Species 11. (Fig. *a* and *b*, Mus. Cuming.)

DELPHINULA SCALARIOIDES. *Delph. testâ globulosâ, albâ; anfractibus rotundis, varicosis, varicibus elevatis, solidis, annuliformibus; interstitiis transversè striatis, striis elevatis; intus margaritaceâ.*

THE SCALARIA-LIKE DELPHINULA. Shell globular, white; whorls round, varicose, varices elevated, solid, ring-like; interstices between the varices marked across with raised striæ; interior pearly, bright salmon-colour.

REEVE, Pro. Zool. Soc., 1843.

Hab. Island of Mindanao, Philippines; Cuming.

The whorls of this species, which is not punctured like the former, are encircled with solid rings about seven to the whorl, after the manner of a *Scalaria*; the shell might indeed be mistaken for one, were it not for its solidity and pearly interior.

Species 12. (Fig. *a* and *b*, Mus. Cuming.)

DELPHINULA VARICOSA. *Delph. testâ angulato-globosâ, albâ, foraminibus sparsim puncturatis; anfractibus supernè angulatis, fortiter varicosis, varicibus multicarinatis et elevato-striatis; intus margaritaceâ.*

THE VARICOSE DELPHINULA. Shell angulately globose, white, punctured here and there with holes; ribs angular round the upper part, strongly varicose, varices many-keeled and elevately striated; interior pearly.

REEVE, Pro. Zool. Soc., 1843.

Hab. Island of Corriegidor, Philippines; Cuming.

This species differs from the *Delphinula Peronii* in having the spire more prominent, and varices entirely across the whorls; they are also more strongly and closely set; the shell is moreover much more sparingly punctured.

Species 13. (Mus. Delessert.)

DELPHINULA SPHÆRULA. *Delph. testâ subdiscoideâ, viridi coccineoque variè tinctâ; spirâ depresso-planâ; anfractibus supernè angulatis, superficie nodoso-un-*

datâ, squamuloso-striatâ, spinis longis, compressis, fornicatis, ad angulum stellatis; infrà convexis, aculeis sparsis ornatis; intus margaritaceâ.

The spherule Delphinula. Shell nearly discoid, variously coloured with green and scarlet; spire depressly flat; whorls angular round the upper part, surface nodosely waved, squamulosely striated, stellated round the angles with long vaulted compressed spines; lower part of the whorls convex, ornamented with scattered spines; interior pearly.

Kiener, Iconographie, pl. 3. f. 3.

Hab. —— ?

Having lately had the pleasure of examining this magnificent shell in the museum of M. Delessert in Paris, I can bear testimony to its specific importance. It is remarkably distinct from any hitherto described species, and I trust it will not be long before we obtain a specimen in this country.

Species 14. (Fig. *a* and *b*, Mus. Cuming.)

Delphinula depressa. *Delph. testâ plano-rotundatâ; spirâ valdè depressâ, foraminibus puncturatâ; albâ; anfractibus supernè angulatis, fortiter varicosis, varicibus ad angulum acuminato-elevatis; intus margaritaceâ.*

The depressed Delphinula. Shell flatly rounded; spire very remarkably depressed, punctured with holes; white; whorls angulated round the upper part, strongly varicose, varices acuminately elevated at the angle; interior pearly.

Reeve, Pro. Zool. Soc., 1843.

Hab. Island of Camaguing, Philippines; Cuming.

No one can fail to recognise this species by its depressed spire and by the pointed elevation of the varices on the angle of the whorls.

15 a

16 a

16 b

15 b

17 a

17 b

18 a

19 a

19 b

18 b

20 a

20 b

18 c

Sowerby, del. et lith.

prel. lith. Linn. imp.

DELPHINULA.

PLATE IV.

(Figures moderately magnified.)

Species 15. (Fig. *a* and *b*, Mus. Cuming.)

DELPHINULA DISCOIDEA. *Delph. testâ discoideâ; spirâ plano-depressâ, liris longitudinalibus et transversis, interstitiis subtiliter striatis, eximiè clathratâ; peripheriâ carinis duabus clathratis prominentibus ornatâ.*

THE DISCOID DELPHINULA. Shell discoid; spire flatly depressed, delicately latticed with transverse and longitudinal ridges, the interstices between which are finely striated; periphery ornamented with two prominent latticed keels.

REEVE, Pro. Zool. Soc., 1843.

Hab. Cagayan, Island of Mindanao, Philippines (found in coarse sand at the depth of ten fathoms); Cuming.

The latticed sculpture of this shell very much resembles the character of a figure in plate 31 of the 'Magasin de Zoologie' for 1834, under the appellation of *D. adamantina*, Duclos. It differs however essentially from that species in form, and I regret to say that the *Delphinula adamantina*, according to the figure alluded to, is quite unknown to me.

Species 16. (Fig. *a* and *b*, Mus. Cuming.)

DELPHINULA EVOLUTA. *Delph. testâ spiraliter discoideâ, partim evolutâ; anfractibus subquadratis, marginibus corrugato-crenatis.*

THE UNROLLED DELPHINULA. Shell spirally discoid, partially unrolled; whorls somewhat square, crenated in a wrinkled manner at the edges.

REEVE, Pro. Zool. Soc., 1843.

Hab. Island of Corrigidor, Bay of Manila (found in coarse sand at the depth of seven fathoms); Cuming.

The loose manner in which this shell is rolled, giving it the appearance of a miniature hunter's horn, is not a casual deformity. Several specimens were collected by Mr. Cuming at the above-mentioned island.

Species 17. (Fig. *a* and *b*, Mus. Belcher.)

DELPHINULA REEVIANA. *Delph. testâ orbiculari, subdiscoideâ, muticâ; spirâ depressiusculâ, anfractibus convexis, longitudinaliter carinulatis, carinulis numerosis, superis distantioribus; interstitiis liris obliquis corrugato-clathratis; labro simplici; umbilico perampio.*

REEVE'S DELPHINULA. Shell orbicular, somewhat discoid, spineless; spire rather depressed, longitudinally keeled, keels numerous, upper ones the more distant from each other; interstices latticed in a wrinkled manner with oblique ridges; lip simple; umbilicus very large.

HINDS, Pro. Zool. Soc., 1843.

Hab. Straits of Malacca (found at the depth of seventeen fathoms); Hinds.

The external sculpture of this shell, which approximates in general form to the *Delphinula nivea*, exhibits a kind of crimped appearance.

I kindly thank Mr. Hinds for attaching my name to this highly interesting species, and especially as belonging to a genus which I have worked out with considerable interest and attention.

Species 18. (Fig. *a*, *b* & *c*, Mus. Cuming.)

DELPHINULA MURICATA. *Delph. testâ turbinatâ, pallidè aurantio-fulvâ, maculis coccineis vividè aspersâ; anfractibus carinis tribus, prominentibus, muricato-squamulosis, cinctâ, supra et infra subtiliter corrugato-striatis; suturis peculiariter profundis.*

THE PRICKLY-KEELED DELPHINULA. Shell turbinated, pale orange-yellow, vividly sprinkled with scarlet spots; whorls encircled round the middle with three prickly-scaled keels, and sculptured above and below with faint wrinkled striæ; sutures peculiarly deep.

REEVE, Pro. Zool. Soc., 1843.

Hab. East Indies; Humphrey, MSS.

This is by no means a newly discovered species; the specimens here figured having been found in the old collection of the late Mr. George Humphreys, with the name and locality above used attached to them in his hand-writing.

Species 19. (Mus. Cuming.)

Delphinula crenata. *Delph. testâ depresso-turbinatâ; anfractibus carinis duabus crenatis confertis cinctis, supra granulosis, infra lævibus; suturis crenatis; labro valdè incrassato.*

The crenated Delphinula. Shell depressly turbinated; whorls encircled with two close strongly crenated keels, granulous above, smooth below; sutures crenated; lip very much thickened.

Kiener, Iconographie, pl. 4. f. 8.

Hab. Bais, Island of Negros, Philippines (found in coarse sand and gravel at the depth of seven fathoms); Cuming.

This interesting species, so imperfectly figured by M. Kiener, may be easily recognised by the elegantly festooned pair of keels which adorn the periphery of the whorls.

Species 20. (Mus. Royale, Paris.)

Delphinula australis. *Delph. testâ parvâ, ovato-rotundatâ, depressâ, spirâ planâ; anfractibus transversim costulatis, longitudinaliter tenuissimè striatis; aperturâ margine reflexo.*

The southern Delphinula. Shell small, ovately rounded, depressed, spire flat; whorls transversely ribbed, longitudinally very finely striated; aperture with the edge reflected.

Kiener, Iconographie, pl. 4. f. 7.

Hab. Islands of St. Peter and St. Francis, coast of New Holland; Kiener.

I publish this species on the authority of M. Kiener, my figure being merely a copy of that published by him. He relates that it was collected by Capt. Baudin during his voyage of circumnavigation.

21 a

22 a

22 b

21 b

23 a

23 b

24 a

25 a

25 b

24 b

26 a

26 b

27

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

Sowerby, del. et lith.

prel. lith. Linn. inq

DELPHINULA.

PLATE V.

(Figures moderately magnified.)

Species 21. (Mus. Cuming.)

DELPHINULA CLATHRATA. *Delph. testâ subdiscoideâ, anfractibus rotundatis, carinulis transversis et longitudinalibus equidistantibus regulariter clathratis; labro incrassato, marginato; umbilico peramplo.*

THE LATTICED DELPHINULA. Shell somewhat discoid, whorls rounded, regularly latticed with equidistant, transverse and longitudinal keels; lip thickened, marginated; umbilicus very large.

REEVE, Pro. Zool. Soc., 1843.

Hab. Island of Corrigidor, Bay of Manila (found in coarse sand at the depth of seven fathoms); Cuming.

A small species with a regularly latticed surface.

Species 22. (Mus. Cuming.)

DELPHINULA COBIJENSIS. *Delph. testâ turbinatâ, minutâ; anfractibus convexis, carinulis transversis et longitudinalibus equidistantibus regulariter clathratis; umbilico mediocri; labro simplici.*

THE COBIJA DELPHINULA. Shell turbinated, very small; ribs convex, regularly latticed with equidistant, transverse and longitudinal ribs; umbilicus middling; lip simple.

REEVE, Pro. Zool. Soc., 1843.

Hab. Port of Cobija, Peru (found under stones in rocky places at low water); Cuming.

The sculpture of this shell, familiarly known to Mr. Cuming as "his little Cobija species," is exactly similar to that of the *D. clathrata*; it is however much less discoid in form, the whorls are not so round, the umbilicus is smaller, and the lip is not marginated.

Species 23. (Mus. Cuming.)

DELPHINULA SYDEREA. *Delph. testâ turbinatâ, spirâ plano-concavâ, apice interdum rosaceo; anfractibus angulato-convexis, tuberculis muricatis, in seriebus duabus aut pluribus, radiatim stellatis; labro incrassato, marginato.*

THE STARRY DELPHINULA. Shell turbinated, spire flatly concave, apex sometimes stained with pink; whorls angularly convex, radiately starred with two or more rows of prickly tubercles; lip thickened and marginated.

REEVE, Pro. Zool. Soc., 1843.

Hab. Island of Camiguing, Philippines (found under stones at low water); Cuming.

The leading feature of this species, and which is especially prominent in young specimens, is its peculiar star-like display of tubercles; the concave flatness of the spire is also remarkable.

Species 24. (Mus. Cuming.)

DELPHINULA RADIATA. *Delph. testâ orbiculari, depresso-turbinatâ, albido-luteolâ, maculis coccineis perpaucis vividè pictâ; anfractibus angulato-convexis, corrugato-striatis; peripheriâ serie unicâ tuberculorum radiatim stellatâ, tuberculis compressis, prominentibus, mucronatis, carinulâ muriculatâ infra; labro simplici.*

THE RADIATED DELPHINULA. Shell orbicular, depressly turbinated; whorls angularly convex, striated in a wrinkled manner; periphery radiately starred with a row of very prominent, compressed, sharp-pointed scales, having a fine prickly-scaled keel encircling the shell beneath; lip simple.

KIENER, Iconographie, pl. 4. f. 9.

Hab. Indian Seas; M. Janelle.

The *Delphinula radiata*, though only lately described, has been long known in this country by the richly coloured specimen here figured, from the collection of the late Mr. George Humphreys. The locality attached to it by that veteran conchologist is "West Indies," but as the above-mentioned place is quoted by Kiener on the authority of M. Janelle, it cannot well be disputed.

Species 25. (Fig. *a* & *b*, Mus. Cuming.)

DELPHINULA CANCELLATA. *Delph. testâ subdiscoideâ, spirâ depressâ; anfractibus liris transversis et longitudinalibus subdistantibus elegantissimè crenulatis, liris tribus centralibus prominentioribus, subspinosis; labro simplici.*

The cancellated Delphinula. Shell somewhat discoid, spire depressed; whorls very elegantly cancellated with rather distant transverse and longitudinal ridges, the three central of which are much more prominent than the rest, and somewhat spinous; lip simple.

Kiener, Iconographie, pl. 4. f. 10.

Hab. Sibonga, Island of Zebu, Philippines (found under stones at low water); Cuming.

This is another species as remarkable for the elegance of its form as for the neatness of its sculpture.

Species 26. (Mus. Woldemar.)

Delphinula nivea. *Delph. testâ orbiculari, niveâ, pellucidâ, spirâ depressâ; anfractibus transversim costellatis, costellis regularibus, superis distantioribus; interstitiis leviter concavis, suturis profundis, subcanaliculatis; labro simplici, umbilico peramplo.*

The snowy-white Delphinula. Shell orbicular, snowy white, transparent, spire depressed; whorls transversely ribbed, ribs regular, the upper fewer and more distant; interstices between the ribs slightly concave, sutures deep, a little canaliculated; lip simple, umbilicus very large.

Turbo nivea, Chemnitz, Conch. Cab., vol. x. pl. 165. f. 1587 and 1588.

Delphinula lævis, Kiener.

Hab. Seas of India; Kiener.

As this species has been already described by Chemnitz, I restore the specific name attached to it by that author, in accordance with the common rules of nomenclature.

Species 27. (Mus. Cuming.)

Delphinula cidaris. *Delph. testâ subgloboso-turbinatâ, solidâ, anfractibus transversim et longitudinaliter tuberculato-costatis, costis longitudinalibus majoribus, prominentioribus; anfractuum parte inferiori foraminosâ.*

The Persian turban Delphinula. Shell somewhat globosely turbinated, solid, whorls transversely and longitudinally tuberculously ribbed, longitudinal ribs the larger and more prominent, lower part of the whorls full of small holes or punctures.

Reeve, Pro. Zool. Soc., 1843.

Hab. Calapan, Island of Mindoro, Philippines (found in coarse sand at the depth of ten fathoms); Cuming.

This is the roundest and most solid species of the genus.

DELPHINULA.

	Plate.	Species.
aculeata, *Reeve*	I.	3
atrata, *id.*	I.	4
australis, *Kiener*	IV.	20
cancellata, *id.*	V.	25
cidaris, *Reeve*	V.	27
clathrata, *id.*	V.	21
Cobijensis, *id.*	V.	22
crenata, *Kiener*	IV.	19
depressa, *id.*	III.	14
discoidea, *id.*	IV.	15
distorta (*Turbo*), Linn.	II.	7
evoluta, *Reeve*	IV.	16
formosa, *id.*	I.	2
imperialis, *id.*	I.	1
incisa, *Reeve*	I.	5
laciniata (*Turbo*), Linnæus	II.	9
melanacantha, Reeve	I.	1
muricata, *id.*	IV.	18
nivea (*Turbo*), Chemnitz	V.	26
nodosa, *Reeve*	II.	8
Peronii, *Kiener*	III.	10
radiata, *id.*	V.	24
Reeviana, *Hinds*	IV.	17
Scalarioides, *Reeve*	III.	2
sphærula, *Kiener*	III.	13
syderea, *Reeve*	V.	23
Tyria, *id.*	II.	6
varicosa, *id.*	III.	12

MONOGRAPH

OF THE GENUS

CYPRICARDIA.

"By the Almighty's ever-during care,
Her procreant vigils Nature keeps
Amid the unfathomable deeps."—*Wordsworth.*

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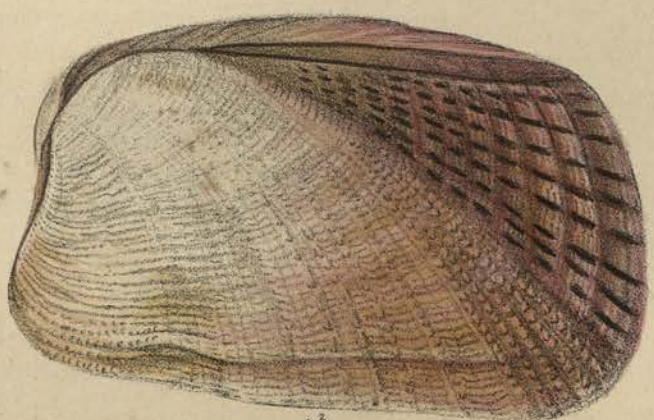

4 b

CYPRICARDIA.

PLATE I.

Genus CYPRICARDIA, Lamarck.

Testa æquivalvis, valdè inæquilateralis, elongato-ovata, nunquam costata, latere antico brevissimo, postico sæpissimè angulato. Cardo: dentibus tribus brevibus infra umbonem utriusque valvæ, dente unico laterali, elongato, interdum subobsoleto. Pallii impressio muscularis, leviter sinuosa. Ligamentum externum.

Shell equivalve, very inequilateral, elongately ovate, never ribbed, anterior side very short, posterior most frequently angulated. Hinge: three short teeth beneath the umbone of each valve, and a single elongated lateral tooth, which is sometimes nearly obsolete. Muscular impression of the mantle slightly sinuous. Ligament external.

The *Cypricardiæ* constitute one of the four genera into which Lamarck distributed the *Carditæ* of his predecessor Bruguière, and the propriety of that separation, as respects the group under present consideration, has been fully confirmed by subsequent discovery. The hinge of *Cypricardia* is of much more complicated character than that of *Cardita*, there being three short teeth beneath the umbone, together with an elongated lateral tooth in each valve: and the shell differs materially both in structure and composition; in structure, in being never radiately ribbed; in composition, in being of an opake white nature, with little or no indication of an epidermis.

Of thirteen species now before me, only *four* of which have ever been figured before, there are three, the *C. coralliophaga, decussata* and *laminata*, which differ materially from the rest in their habits, inasmuch as they live imbedded in shells, or large masses of madrepore, after the manner of the *Lithodomi*, and, as regards the shell, are not much unlike them in form and general appearance. They are of a peculiar tenuity and transparency, and do not present that posterior angulation which is so prominent in the typical species. De Blainville has already proposed to separate them under the new generic title of *Coralliophaga*, and it may yet be matter for consideration whether this genus be not worthy of adoption.

Species 1. (Mus. Brit.)

CYPRICARDIA LIRATA. *Cypr. testâ oblongo-ovatâ, lævi, albâ; incrementi liris irregularibus, prominentibus, numerosis, ornatâ, epidermide versus marginem indutâ; umbonibus compressis; intus albâ, posticè violaceo tinctâ.*

THE RIDGED CYPRICARDIA. Shell oblong-ovate, smooth, white, ornamented with numerous prominent irregular ridges of growth, covered with an epidermis towards the margin; umbones compressed; interior white, stained at the posterior end with violet.

REEVE, Pro. Zool. Soc., 1843.

Hab. ——?

The highly developed lateral tooth, so characteristic in the typical species of this genus, is almost obsolete in this; it differs from them also in the character of the epidermis.

Species 2. (Mus. Brit.)

CYPRICARDIA ANGULATA. *Cypr. testâ subquadrato-oblongâ, posticè obliquè angulatâ, decussatim striatâ, striis longitudinalibus parallelis, latere postico obliquè truncato; albidâ, intus aurantio-lutea, posticè violaceo vividè tinctâ.*

THE ANGULATED CYPRICARDIA. Shell somewhat squarely oblong, posteriorly obliquely angulated, decussately striated, longitudinal striæ parallel to each other, posterior side obliquely truncated; whitish, interior orange-yellow; vividly stained at the posterior end with violet.

LAMARCK, Anim. sans vert. (Deshayes' edit.), vol. vi. p. 438.

Chama oblonga, var., Chemnitz.

Hab. ——?

The longitudinal striæ of this species do not exhibit that peculiar waved character which they present in the following; it is a more solid shell, and much more highly-coloured in the interior.

Species 3. (Mus. Brit.)

CYPRICARDIA ROSTRATA. *Cypr. testâ subquadrato-oblongâ, posticè obliquè angulatâ, decussatim striatâ, striis longitudinalibus irregulariter undulatis; latere postico productiore, subattenuato, rostrato; albâ, intus albâ, posticè violaceo leviter tinctâ.*

The beaked Cypricardia. Shell somewhat squarely oblong, posteriorly obliquely angulated, decussately striated, longitudinal striæ irregularly waved; posterior side produced, somewhat attenuated, beaked; white, interior white, faintly stained with violet at the posterior end.

Lamarck, Anim. sans vert. (Deshayes' edit.), vol. vi. p. 439.

Hab. Kangaroo Island, New Holland; Lamarck. Island of Ticao, Philippines (found under stones and coral at low water); Cuming.

This shell is of a more delicate opake white composition than the preceding; the extremities are more produced and the longitudinal striæ are waved.

Species 4. (Fig. *a* and *b*, Mus. Brit.)

Cypricardia oblonga. *Cypr. testâ oblongo-ovatâ, posticè obliquè angulatâ, decussatim striatâ, striis longitudinalibus nodulosis, leviter undulosis; umbonibus compressis; lutescente, aut pallidè rubido-aurantiâ, angulo postico lineis purpureis interruptis vividè notato; intus albidâ, roseo plus minusve tinctâ, lineis purpureis brevibus prope marginem radiatâ.*

The oblong Cypricardia. Shell oblong-ovate, posteriorly obliquely angulated, decussately striated, longitudinal striæ slightly waved, made nodulous by the crossing of the radiating striæ; umbones compressed; yellowish or pale reddish orange, posterior angle of the shell vividly marked with interrupted purple lines; interior white, more or less stained with pink, and radiated near the margin with short purple lines.

Sowerby, Genera of Shells, No. 20.

Chama oblonga, Linnæus.

Hab. New Holland; Dr. Goodhall, MSS. The orange-tinted variety (Fig. 4 *b*) found by Mr. Cuming at Matnog, Province of Albany, Island of Luzon, Philippines, in coarse coral sand at low water.

It may be observed that I clearly identify the *C. oblonga, Guinaica* and *angulata* as three separate and distinct species; my previous synonyma therefore in Conch. Syst., vol. i. p. 104, copied from Lamarck, are incorrect. The two magnificent specimens of the *C. oblonga* here figured are from the celebrated Goodhall collection, now dispersed.

Species 5. (Mus. Brit.)

Cypricardia serrata. *Cypr. testâ subquadrato-ovatâ, subflexuoso-distortâ, incrementi gradibus laminis fragilibus numerosis, exiliter serratis, peculiariter notatis, interstitiis subtilissimè radiatim sulcatis; pallidè rosaceâ, intus vividè purpureâ.*

The serrated Cypricardia. Shell somewhat squarely oval, rather flexuously distorted, stages of growth peculiarly marked by a number of fragile laminæ, finely serrated at the edge, interstices filled with delicate radiating grooves; pale pink, interior stained with rich purple.

Reeve, Pro. Zool. Soc., 1843.

Hab. —— ?

No figure nor description can do justice to this beautiful shell, so remarkable on account of the delicacy of the pink serrated laminæ.

Species 6. (Mus. Brit.)

Cypricardia decussata. *Cypr. testâ elongato-ovatâ, regulariter convexâ, tenui, albâ, semipellucidâ, striis exilibus, undulatis, elevatis, obliquè decussatis, ornatâ.*

The decussated Cypricardia. Shell elongately ovate, regularly convex, thin, white, semi-transparent, covered with fine, waved, obliquely decussated, elevated striæ.

Reeve, Pro. Zool. Soc., 1843.

Hab. —— ?

This is evidently one of the terebrating species, belonging to that section of the genus which De Blainville distinguishes by the new title of *Coralliophaga*.

The term *decussated* is here used in its strictest and proper sense, signifying *oblique* crossing, as in the letter X.

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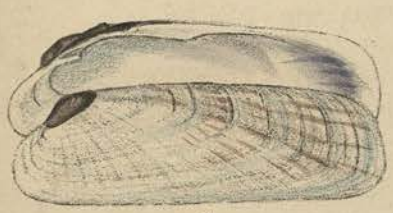


11

12

13

CYPRICARDIA.

PLATE II.

Species 7. (Mus. Cuming.)

CYPRICARDIA VELLICATA. *Cypr. testâ oblongo-ovatâ, compressâ, prope marginem ventralem anticam peculiariter vellicatâ; albâ, latere postico purpureo-fusco plus minusve vividè radiato; umbonibus purpureo-fuscis.*

THE PINCHED CYPRICARDIA. Shell oblong-ovate, compressed, peculiarly pinched near the anterior ventral margin; white, posterior side more or less rayed with purplish brown; umbones purplish brown.

REEVE, Pro. Zool. Soc., 1843.

Hab. Calbyog, Island of Samar, Philippines (found on soft slaty stones at low water); Cuming.

This interesting species, which has been found in great abundance by Mr. Cuming at the above locality, is distinguished not only by the purple-brown streaks which are more or less strongly depicted on the posterior side of the shell, but by the peculiar manner in which it is pinched, as it were, near the anterior ventral margin.

Species 8. (Mus. Cuming.)

CYPRICARDIA INCARNATA. *Cypr. testâ oblongo-ovatâ, tenui, plano-convexâ, liris planis subtilissimis numerosis ab umbonibus undulatim divergentibus, eximiè notatâ; albidâ, posticè incarnatâ.*

THE FLESH-TINTED CYPRICARDIA. Shell oblong-ovate, thin, flatly convex, delicately marked with a number of very fine flat undulating ridges diverging from the umbones; whitish, flesh-tinted on the posterior side.

REEVE, Pro. Zool. Soc., 1843.

Hab. Island of Burias, Philippines (found under a stone at low water); Cuming.

The surpassing delicacy of the ridges is exceedingly characteristic in this species; instead of looking raised upon the surface, they have all the appearance of undulating rays of light.

Species 9. (Mus. Cuming.)

CYPRICARDIA LAMINATA. *Cypr. testâ trapezio-oblongâ, tenui, albâ, latere postico valdè latiore, rotundato, compresso, laminis duabus vel tribus, elevatis, subdistantibus, fimbriato.*

THE LAMINATED CYPRICARDIA. Shell trapeziformly oblong, thin, white, posterior side much the wider, rounded, compressed, and frilled with two or three rather distant raised laminæ.

REEVE, Pro. Zool. Soc., 1843.

Hab. Lord Hood's Island, Pacific Ocean (found at the depth of five fathoms piercing, and partially imbedded in, the *Avicula margaritifera*); Cuming.

This peculiarly shaped shell exhibits the same kind of delicate marginal frill of laminæ as the well-known *Cypricardia coralliophaga* (Fig. 12), and belongs as above stated to a mollusk of the same terebrating habits. The shells of terebrating mollusks vary so exceedingly in form, according to circumstances of situation, &c., that were the *C. laminata* not entirely destitute of the fine radiating striæ which characterise the *C. coralliophaga*, it might be regarded as a modification of that species.

Species 10. (Mus. Cuming.)

CYPRICARDIA OBESA. *Cypr. testâ subquadrato-ovatâ, valdè gibbosâ, tumidâ, latere postico subobliquè angulato; longitudinaliter striatâ, striis profundè incisis; lutescente-albâ.*

THE STOUT CYPRICARDIA. Shell somewhat squarely oval, very gibbous, swollen, posterior side rather obliquely angulated, longitudinally striated, striæ deeply engraved; yellowish white.

REEVE, Pro. Zool. Soc., 1843.

Hab. —— ?

This remarkable shell may be easily recognised by its stout swollen formation; it differs materially in this respect from its nearest allied species the *C. Guinaica*, as well as in the absence of any nodulous divergent striæ. The ridges between the longitudinal striæ in these species are singularly opposite: in the *Cypricardia obesa* they are sharp and parallel to each other; in the *Cypricardia Guinaica* they are rounded and irregularly waved. Differences in regard to colour are also conspicuous, for the shell under consideration exhibits no indication of pink in the interior, but a kind of a burnt reddish-yellow tinge around the posterior muscular cicatrix.

Species 11. (Mus. Cuming.)

CYPRICARDIA SOLENOIDES. *Cypr. testâ angustatâ, Soleniformi, latere postico plano-angulato; albâ, posticè*

purpureo-fusco obsoletè radiatâ; umbonibus purpureo-fuscis; intus albâ, ad extremitatem posticam purpureo-violaceo tinctâ.

The Solen-like Cypricardia. Shell narrow, Solen-shaped, posterior side flatly angulated; white, posteriorly obsoletely rayed with purplish brown; umbones purplish brown; interior white, stained with purple-violet at the posterior extremity.

Reeve, Pro. Zool. Soc., 1843.

Hab. Lord Hood's Island, Pacific Ocean (found at the depth of five fathoms, piercing, and imbedded in, the *Avicula margaritifera*); Cuming.

The *Cypricardia Solenoides*, though approximating greatly in form to the *Cypricardia coralliophaga*, differs materially in structure and composition; the two species indeed exhibit all the differences upon which De Blainville founded his genus *Coralliophaga*. Instead of presenting that pellucid tenuity which seems peculiar to the terebrating species, it is of the same solid opake structure as the *Cypricardia vellicata*, the umbones have the same purplish-brown patch upon them, and there is an evident indication of the same posterior streaks of that colour.

Species 12. (Mus. Cuming.)

Cypricardia coralliophaga. *Cypr. testâ angustatâ, cylindraceâ, Modiolæformi, tenui, semi-pellucidâ, striis numerosis, ab umbonibus divergentibus, eximiè notatâ; latere postico laminis plurimis, elevatis, subdistantibus, fimbriato; intus albâ, extremitate posticâ ad marginem roseo-tinctâ.*

The coral-eating Cypricardia. Shell narrow, cylindrical, Modiola-shaped, thin, semitransparent, delicately marked with numerous striæ diverging from the umbones; posterior side frilled with several rather distant raised laminæ; interior white, posterior extremity stained with rose along the edge.

Lamarck, Anim. sans vert. (Deshayes' edit.), vol. vi. p. 439.

Chama coralliophaga, Gmelin, Chemnitz.

Cardita dactylus, Bruguière.

Coralliophaga Carditoides, De Blainville.

Hab. Lord Hood's Island, Pacific Ocean (found at the depth of five fathoms, piercing, and imbedded in, the *Avicula margaritifera*); Cuming. West Indies (found imbedded within masses of corals and madrepores).

The name attached to this species has the rare merit of indicating in some measure the habits of the animal. For further notice of it, I must refer the reader to my general remarks at the commencement of the genus.

Species 13. (Mus. Cuming.)

Cypricardia Guinaica. *Cypr. testâ subquadrato-ovatâ, gibbosiusculâ, obliquè angulatâ, angulo prope umbones prominente; latere postico ad extremitatem compresso, ad apicem rotundato; lutescente-albâ, umbones versus pallidè purpureâ, striis nodulosis divergentibus, lirisque undulatis transversis eximiè decussatâ; intus albâ, in medio roseo-tinctâ.*

The Guinea Cypricardia. Shell somewhat squarely oval, rather gibbous, obliquely angulated, angle rather prominent near the umbones; posterior side compressed at the extremity, rounded at the top; yellowish white, tinged with pale purple towards the umbones, delicately crossed over the entire surface, but more strongly towards the ventral margin, with nodulous divergent striæ and waved transverse ridges; interior white, stained in the middle with rose-pink.

Lamarck, Anim. sans vert. (Deshayes' edit.), vol. vi. p. 438.

Chama Guinaica, Chemnitz.

Cardita carinata, Bruguière.

Hab. Lord Hood's Island, Pacific Ocean (found on the reefs at half-tide in coarse coral sand); Cuming.

This is not the *Chama oblonga* of Linnæus (for which vide Plate I. Fig. 4 *a* and *b*), as supposed by Lamarck and Deshayes; it is a shorter, stouter shell, and invariably smaller.

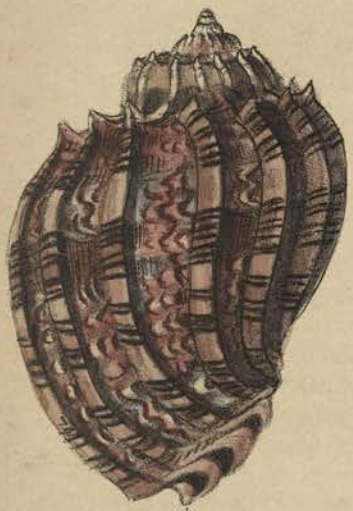
MONOGRAPH

OF THE GENUS

H A R P A.

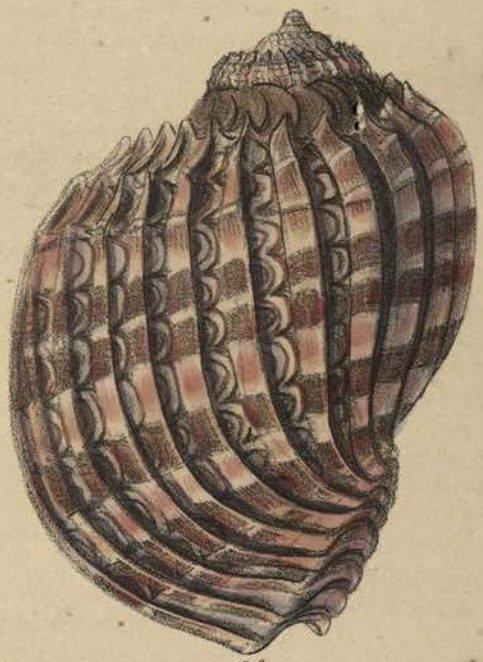
" With joy and shout
The hollow universal orb they filled,
And touched their golden Harps, and hymning praised
God and his works."—*Milton.*

1a



1b

1c



2a

2b

2d

2c

Sowerby del. et lith.

prd. lith. Linn. imp.

HARPA.

PLATE I.

Genus HARPA, Lamarck.

Testa ovalis, ventricosa, ad basim emarginata; spirâ brevi, latissimè canaliculatâ, apice elato, acuto; anfractibus longitudinaliter costatis, costis plus minusve numerosis, arcuatis, parallelis, politis, supernè acutissimè mucronatis; aperturâ ovato-oblongâ, amplâ; columellâ subexpansâ, lævissimâ, politâ; labro incrassato, costam ultimam formante. Operculum nullum.

Shell oval, ventricose, emarginated at the base; spire short, very widely canaliculated, apex raised and acute; whorls longitudinally ribbed, ribs more or less in number, curved, parallel, polished, and sharply pointed at the top; aperture ovately oblong, large; columella somewhat expanded, very smooth, polished; lip thickened, forming the last whorl. No operculum.

Few groups of mollusks present a more complete generic cast of character than that of the *Harpæ*, whether as respects the shell or its animal inhabitant. The most characteristic features of the shell are so perfectly distinct from those of the proximate genera, that one is almost tempted to imagine that there must be a gap, on either side, in the system which nature has omitted to fill up, and the animal, according to MM. Reynaud and Quoy, exhibits quite as isolated an association of character. The foot or locomotive disk of this mollusk is described by the enterprising malacologist of the Astrolabe to be so large and muscular that it is incapable of entering the shell, and the animal is said to have the power, when irritated or in any dangerous emergency, of spontaneously divesting itself of so much of this muscular disk as it is unable to protect.

The *Harpæ* are not very numerous in species, and as they run apparently very much into each other, it has been thought extremely difficult to identify them according to the limits established by Lamarck. Great errors have been on this account promulgated in their specific arrangement; no two shells for example can be more clearly distinct than the many-ribbed *Harpa imperialis* and the many-ribbed variety of the *Harpa ventricosa*; and the *Harpa conoidalis* may certainly be distinguished from the latter, with a moderate exercise of discrimination, though all these have been, and are still, confounded together. The acute perception of Lamarck, however it may have failed him at the close of his useful life, detected certain specific characters, the value of which an extensive series of specimens, instead of generating confusion, has enabled me to estimate; and I have selected the "Harps" thus early for illustration, not from any accession of novelty, but from a desire to perpetuate Lamarck's arrangement of them.

No shells have perhaps excited more universal admiration than the "Harps," so rich and delicate in their colouring, so symmetrical in their proportions. The longitudinal ribs, which constitute their most striking peculiarity, are analogous in structure to the varices of the *Canalifera*, each forming in its turn the margin of the aperture; and like them, they are deposited by the animal to protect the outer lip during a season of rest, the greater multiplicity of ribs indicating the more periodical growth of the shell.

The *Harpæ*, says Broderip, are taken at the Mauritius on sand banks with a small rake to which a net is attached when it is low water, at night and at sunrise; it is conjectured that at those times they are out on their feed.

Species 1. (Fig. *a*, Mus. Townley; Fig. *b*, Mus. Cuming; Fig. *c*, Mus. Steere.)

HARPA NOBILIS. *Harp. testâ ovatâ, subventricosâ, basim versus attenuato-coarctatâ, griseo-rosaceâ, fusco alboque arcuato-articulato, maculisque grandibus purpureo-sanguineis, quadratis, perpaucis, vividè pictâ; costis latiusculis, lineis nigris capillaribus transversim fasciculatis.*

THE NOBLE HARP. Shell ovate, rather ventricose, attenuately contracted towards the base, greyish pink, vividly painted with arcuately articulated brown and white, and a very few large square spots of purple-crimson; ribs rather wide, crossed here and there with a number of black hair-like lines.

RUMPHIUS, Mus., pl. 32. fig. L.

LAMARCK, Anim. sans vert., vol. vii. p. 256.

Cithara nobilis, Martini.

Buccinum harpa, var. e, Bruguière.

Hab. Island of Ticao, Philippine Islands (found in sandy mud in deep water); Cuming.

The *Harpa nobilis* is one of the most distinct species of the genus. It is very much contracted in form, and the painting is peculiarly distributed; the ribs are vi-

vidly crossed with a number of clear, black, hair-like lines, and the interstices, instead of exhibiting that bold festooned pattern which is common to the *Harpæ ventricosa, conoidalis*, and *articularis*, are ornamented with narrow equidistant fillets of curved brown and white. The shell is moreover highly characterized by the appearance of one or two large square crimson spots.

The specimen represented at Fig. 1 *b*, collected by Mr. Cuming at the above-mentioned locality, has a rich purple hue; that at Fig. 1 *c* is an excellent example of a lighter tint, in the cabinet of Miss Steere, an intelligent collector of *Cyprææ, Murices*, and other popular genera; and the specimen figured at Fig. 1 *a* is selected from the very choice Harp collection of Mr. Townley, on account of the breadth and determined character of the ribs.

Species 2. (Fig. *a*, Mus. Cuming; Fig. *b* and *c*, Mus. Stainforth; Fig. *d*, Mus. Townley.)

HARPA VENTRICOSA. *Harp. testâ ovato-ventricosâ; costis latis, angulato-compressis, plus minusve numerosis, purpureo-rubro maculato-tinctis, interstitiis lineis spadiceo-fuscis, regulariter arcuatis, vividè pictis; columellâ perpolitâ, maculis grandibus nigerrimo-fuscis ornatâ; aperturâ amplissimâ, fauce carneolo purpureoque variegatâ.*

THE VENTRICOSE HARP. Shell ovately ventricose; ribs broad, angularly compressed, more or less numerous, stained with flesh-colour and square spots of purple-red, interstices vividly painted with regular festoons of reddish brown; columella very highly enamelled, ornamented with one or two dark brown blotches; aperture very large, variegated with light flesh-colour and purple.

LAMARCK, Anim. sans vert., vol. vii. p. 255.

Cithara major, Klein, Martini.

Buccinum harpa, Linnæus.

Buccinum harpa, var. a, Bruguière.

Testa peradolescens.

Shell very young.

Harpa striata, Lamarck.

Hab. Mauritius (found in sand, in rocky places).

The most conspicuous feature in this species is the sharp angular compression of the ribs, and I regard it as being perfectly distinct from either of the species referred to it as varieties by Deshayes; namely the *Harpæ conoidalis, articularis*, or *imperialis*. The specimen represented at Fig. 2 *d*. is one of immature growth, but in a much more advanced state than that described by Lamarck under the name of *Harpa striata*. I shall speak of the decided specific dissimilitude between the *Harpæ ventricosa* and *imperialis* in my observations on that species.

3 a

4 a

4 b

5

4 c

3 b

4 d

Sowerby, del. et lith.

prel. lith. Linn. imp

HARPA.

PLATE II.

Species 3. (Fig. *a* and *b*, Mus. Cuming.)

HARPA GRACILIS. *Harp. testâ elongato-oblongâ, gracili, semipellucidâ, albidâ, roseo eximiè variegatâ; costis angustis, muticis, lævigatis, lineis roseis capillaribus transversis ornatâ.*

THE SLENDER HARP. Shell elongately oblong, slender, semitransparent, whitish, delicately variegated with light rose-colour; ribs narrow, spineless, smooth, ornamented with transverse hair-like rose lines.

BRODERIP and SOWERBY, Zool. Journ., vol. iv. p. 373.

Harpa minor, var., Gray.

Hab. Island of Annaa or Chain Island, Pacific Ocean (found on the reefs); Cuming.

The shell here represented, from the collection of Mr. Cuming, is, I think, unquestionably distinct from the well-known *Harpa minor*, both in form and extreme delicacy of colouring, and I have little doubt but that this opinion will be one day confirmed by the discovery of numerous specimens.

Species 4. (Fig. *a*, *b* & *c*, Mus. Cuming; Fig. *d*, Mus. Stainforth.)

HARPA ARTICULARIS. *Harp. testâ ovato-inflatâ, tenui, cinereo-griseâ; costis sæpissimè angustis, subdistantibus, angulato-compressis, nigro alboque articulatim maculatis, interstitiis lineis cinereis arcuatis subobscurè pictis; columellâ omninò cinereo-fuscâ.*

THE ARTICULATED HARP. Shell ovately inflated, thin, ashy grey; ribs generally narrow and rather distant, angularly compressed, articulately spotted with black and white, interstices obscurely painted with curved ashy lines; columella entirely ashy brown.

LAMARCK, Anim. sans vert., vol. vii. p. 256; Encyclopédie Méthodique, pl. 404. fig. 3.

Harpa ventricosa, var. Deshayes, Enc. Méth.

Hab. Island of Ticao, Philippines (found in sandy mud in deep water); Cuming.

Variety β. (Fig. 4, *a* and *d*.)

Testa pallidior, costis lineis nigris transversis, perpaucioribus, fasciculatis.

Shell paler, ribs with the dark transverse lines much fewer in number and separated into groups.

Hab. Feejee Islands, Pacific Ocean.

There are scarcely two species of the genus, when compared by their typical varieties, that present a more absolute contrast than the *Harpæ articularis* and *conoidalis*; the one remarkable for the vivid articulated colouring of the ribs, the other for its simplicity of colouring and absence of articulation. Yet, at the same time, there are no two species which more confusedly run into each other; they are indeed so intimately connected by the examples Pl. II. fig. 4 *d*, and Pl. III. fig. 7 *e*, that I have only been enabled to establish a line of separation by the consideration of the following characters; namely, that in this species the ribs are always sharply angular, and the intercostal festoons very obscurely painted.

The ribs of the *Harpa articularis* are for the most part very narrow, the shell having been formerly distinguished as "the narrow-ribbed Harp;" Mr. Cuming has, however, recently collected specimens at the Philippine Islands, in which the ribs are of much greater width and brilliancy, and I have much pleasure in publishing a drawing, Fig. 4 *b*, of one of the specimens alluded to.

The variety β, which graduates in many respects into the *Harpa conoidalis*, is characterized by the dark lines on the ribs not being articulated, but isolated in groups.

Species 5. (Mus. Stainforth.)

HARPA IMPERIALIS. *Harp. testâ orbiculari-turgidâ, multicostatâ, costis triginta aut pluribus, rotundatis, subirregularibus, confertis, supernè elato-mucronatis, interstitiis profundè striatis; albidâ, zonis numerosis interruptis, carneolis, cingulatâ; spirâ latissimè canaliculatâ, apice rosaceo; columellâ et aperturæ fauce vividè aurantiis.*

THE IMPERIAL OR MANY-RIBBED HARP. Shell orbicularly swollen, many-ribbed, ribs thirty or more in number, rounded, somewhat irregular, close-set, elevately pointed at the top, interstices deeply striated; whitish, encircled with a number of interrupted flesh-coloured zones; spire very widely canaliculated, apex rose-tinted; columella and interior of the shell stained with bright orange.

CHEMNITZ, Conch. Cab., vol. x. p. 184. pl. 152. fig. 1452.

LAMARCK, Anim. sans vert., vol. vii. p. 254.

Harpa multicostata, Sowerby.

Harpa ventricosa, var., Deshayes, Kiener.

Buccinum harpa, var. e, Bruguière.
Buccinum costatum, Linnæus.
Lyra Davidis, Martini.

Hab. Mauritius (found in sand, in rocky places in deep water); Cuming.

This very beautiful and highly valued shell has been considered by some authors to be merely a many-ribbed variety of the *Harpa ventricosa,* on account of the uncertain number and proximity of the ribs in that species; it requires however, in my opinion, no very great power of discrimination to remark one or two important characters in the *Harpa imperialis* which are decidedly peculiar to that species. The ribs, without regard to number, differ essentially in being rounded; the interstices between them are deeply striated and never exhibit the least indication of that bold festoon-painting which forms so prominent a feature in the *Harpa ventricosa*; and again, there is a strong peculiarity in the columella and interior of the shell being lined with an enamel of bright orange. Other differences might be particularized, but these are fully sufficient to establish the accuracy of Lamarck's arrangement.

7a

6a

7b

7c

7d

6b

7e

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

Sowerby, del. et lith.

prel. lith. Linn. imp.

HARPA.

PLATE III.

Species 6. (Fig. *a* and *b*, Mus. Cuming.)

HARPA MINOR. *Harp. testâ ovato-oblongâ, griseâ, maculis fuscis et albis, arcuatim articulatis, vividè pictâ; costis angustis, subdistantibus, nigro-lineatis, lineis capillaribus geminatis; spirâ exsertiusculâ.*

THE LESSER HARP. Shell ovately oblong, grey, vividly painted with curved, articulated, brown and white spots; ribs narrow, rather distant, crossed with black hair-like lines ranging in pairs; spire rather exserted.

RUMPHIUS, Mus., pl. 32. f. M.

LAMARCK, Anim. sans vert., vol. vii. p. 257.

Hab. Philippine, Society Islands, &c. (found under stones at low water); Cuming.

This is a very peculiar species, both as regards form and colour, although the painting of articulated curved spots is very similar to that in the *Harpa nobilis*. There is generally a single dark brown spot on the enamel surface of the columella.

Species 7. (Fig. *a*, *d* and *e*, Mus. Townley; Fig. *b* and *c*, Mus. Burt.

Variety α. (Fig. 7 *d*.)

HARPA CONOIDALIS. *Harp. testâ ovato-conoidali, subventricosâ; anfractibus angustis, rotundatis, subdistantibus, carneolato-tinctis, interstitiis lineis arcuatis, pallidè fuscis, obscurè pictis; spirâ exsertiusculâ.*

THE CONOIDICAL HARP. Shell ovately conoidical, rather ventricose; whorls narrow, rounded, rather distant, flesh-tinted, interstices rather obscurely and irregularly painted with faint festooned brown lines; spire rather exserted.

LAMARCK, Anim. sans vert., vol. vii. p. 255.

Harpa ventricosa, var., Deshayes.

Hab. Ceylon (found in mud in deep water).

The *Harpa conoidalis* is by far the most variable of the species, and it is extremely difficult to arrange any scale of varieties likely to remain conventional; I have however distributed the numerous specimens under examination into four divisions. The first division, Variety α, the type of the species, is characterized by the simplicity and plainness of the ribs, both in respect to form and colour, and the festooned pattern of the interstices is very indistinctly portrayed.

Variety β. (Fig. 7 *b*.)

Testa costis interstitiisque maculis carneolato-roseis variegatis.

Shell with the ribs and interstices variegated with distinct spots of fleshy rose.

This variety is chiefly remarkable for the distinctness of the spots, which are of a particularly delicate rose-tint. A few scattered dark lines begin to appear on the ribs.

Variety γ. (Fig. 7 *a*.)

Testa ferrugineo-fusco tincta; costis latioribus, lineis nigris capillaribus sparsis ornatis, interstitiorum lineis arcuatis vividè pictis.

Shell stained with rich chocolate or rusty brown; ribs wider, ornamented with scattered black hair-like lines, the festooned lines of the interstices broadly and vividly painted.

The rich chocolate-brown colouring of this variety renders it perhaps the most distinct and best characterized of the series; the painted festoons between the ribs are especially rich, and there is an admirable regularity in their arrangement.

Variety δ. (Fig. 7 *c* and *e*.)

Testa carneolato-fusca; costis subirregularibus, lineis nigris capillaribus, undulatis, fusciculatis, ornatis.

Shell fleshy brown; ribs rather irregular, ornamented with finely waved black hair-like lines separated in groups of three or four together.

We have an approach in this beautiful variety to Variety β of the *Harpa articularis*, though no two species are more distinct compared by their typical varieties. This is the closest affinity that seems to exist between any two species of the genus.

---

8 a

8 b

8 c

9 a

8 d

9 c

9 b

Sowerby, del et lith.

prel. lith. Linn. imp.

HARPA.

PLATE IV.

Species 8. (Fig. *b*, Mus. Cuming; Fig. *a* and *c*, Mus. Stainforth; Fig. *d*, Mus. Brit.)

HARPA ROSEA. *Harp. testâ ovatâ, tenui, ventricosâ, pallidè luteolo-fuscâ, maculis roseis grandibus quadratis trifasciatim ornatâ; costis planis, irregularibus, nunc latissimis, nunc angustissimis, subobsoletis, interstitiis lineis eximiis arcuatis, nebuloso-articulatis, subirregulariter pictâ; margine crenato.*

THE ROSE HARP. Shell ovate, thin, ventricose, pale yellowish brown, ornamented with large, square, bright rose spots ranging round the shell in three interrupted bands; ribs flat, irregular, sometimes very broad, sometimes very narrow and rather obsolete, interstices rather irregularly painted with delicate curved lines confusedly articulated together; margin crenated.

LAMARCK, Anim. sans vert., vol. vii. p. 256.

Cithara rosea, Klein.

Harpa rosacea, Martini.

Buccinum harpa, var. *b*, Bruguière.

Hab. Senegal, and north of the Gambia, Africa (found in sand, in deep water).

This delicate and much-admired species is allied in some respects to the *Harpa nobilis*; the ribs are however more feebly developed, and they are not crossed with the same vivid black lines. The rose spots are more abundant and characteristic, and of a much more delicate colour.

In the specimen represented at Fig. 8 *a*, from the very choice collection of Mr. Stainforth, the ribs are unusually broad.

Species 9. (Fig. *a* & *b*, Mus. Cuming; Fig. *c*, Mus. Stainforth.)

HARPA CRENATA. *Harp. testâ ovatâ, supernè tumidâ, cæruleo-griseâ, macul. grandibus perpaucis sanguineo-purpureis irregulariter aspersâ; costis nunc latis, nunc angustissimis, supernè muricatis, interstitiis lineis eximiis, arcuatis, nebuloso-articulatis, variè pictâ; margine crenato.*

THE CRENATED HARP. Shell ovate, swollen round the upper part, bluish grey, irregularly sprinkled with a very few large crimson-purple spots; ribs sometimes broad, sometimes very narrow, armed with three or four prickly tubercles near the top, interstices variously painted with delicate curved lines confusedly articulated together; margin crenated.

SWAINSON, App. Bligh. Cat. 5.

Harpa crenata rosea, Gray.

Harpa rosea (adult), Kiener.

Harpa Rivoliana, Lesson.

Harpa testudinalis, } nonnul.
Harpa Mexicana, }

Variety β. (Fig. 9 *b*.)

Testa elongatior, costis planis, latioribus.

Shell more elongated, ribs flat and broader.

Hab. Acapulco, Mexico (found in sandy mud in deep water); Cuming.

This shell, which has a very strongly crenated lip, may be separated with great propriety as a distinct species from the *Harpa rosea*, and I quite agree with Mr. Swainson, M. Lesson and others, in arranging it as such. The lip of the *Harpa rosea* is also crenated, and it has certainly a very strong affinity with the *Harpa crenata* in all respects excepting colour; the deep blue-grey is peculiar to the latter, and when it is remembered that they inhabit very different localities, I think a specific distinction should be allotted to them if one can possibly be defined.

The assertion of a modern writer, whose monograph of this genus is not a very creditable one, that the *Harpa rosea* is the young of the *Harpa crenata*, is perfectly absurd; it is no uncommon thing to see either in different stages of growth, and I have represented an old *Harpa rosea*, Fig. 8 *d*, with a young *Harpa crenata*, Fig. 9 *c*, in order to remove this impression.

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